



## SOCIAL DETERMINANTS AND PREMATURE MORTALITY FOR NON-COMMUNICABLE CHRONIC DISEASE: A SCOPING REVIEW

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### ABSTRACT

**Objective:** to identify the scientific evidence available on the social determinants of health, related to premature mortality from non-transmissible chronic diseases. **Method:** this is a literature review study using the scoping review method, which was carried out from April 10 to July 12, 2020, in the following databases: Medical Literature Analysis and Retrieval System Online (MEDLINE), Cumulative Index to Nursing and Allied Health literature (CINAHL), and Web of Science and the Scientific Electronic Library Online (SciELO) and Virtual Health Library (VHL) libraries. The stages of identification and selection of studies were used; data mapping; confrontation and discussion of results. **Results:** it was evident from the 13 articles analyzed, that premature mortality from chronic non-communicable disease is strongly related to social determinants of health, with emphasis on males, education and income. **Conclusion:** the results impose new challenges for health professionals to implement public policies and contribute to health surveillance, in relation to premature mortality from chronic non-communicable diseases.

**Keywords:** Iniquidade Social. Mortalidade Prematura. Doença Crônica. Saúde Pública.

### INTRODUCTION

Non-communicable Chronic Diseases (NCDs) are multifactorial diseases that develop throughout life and are long-lasting. They are related to several factors, social determinants and conditions, in addition to sharing individual risk factors, such as smoking, harmful alcohol consumption, physical inactivity and unhealthy eating<sup>(1)</sup>.

Premature mortality is defined as deaths occurring in the age group of 30 to 69 years-old<sup>(2)</sup>. In Brazil, NCDs correspond to 72% of the causes of death in all age groups, while in premature mortality; this percentage is 72.6%<sup>(2)</sup>. Cardiovascular diseases and neoplasms were the main causes of premature mortality in both

sexes, accounting for 45.30% and 43.45% of deaths, respectively, with the male gender having higher values when compared to the female<sup>(3)</sup>.

Individuals affected by NCDs and the consequent premature mortality, have repercussions for the productive sector, families and society, as well as, financial impact on the health system<sup>(4)</sup>.

To reduce the impact of NCDs, it is necessary to develop and apply control, surveillance and monitoring policies, with a focus on prevention and care for the vulnerable group that has any of these pathologies<sup>(5)</sup>. It is also essential to act on health condition and determinants, articulating more effective actions by the State to minimize inequalities, together with public policies that

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combat risk factors, such as the promotion of healthy habits: healthy eating, smoke-free environments, promotion of physical activities in schools, among others<sup>(5)</sup>.

Due to the importance of social determinants of health (SDH) in the health and disease process, and in order to reduce health inequities, the World Health Organization (WHO) established the Commission on SDH in 2005<sup>(6)</sup>. This Commission organized a structured concept on SDH, in which social position is the center of social inequalities<sup>(6)</sup>. The structural concept contemplates the existence of two classes, which are: structural determinants and intermediate determinants<sup>(6)</sup>.

The structural determinants include the economic position that is directly linked to health inequalities, especially in developing countries. This element includes income; education; occupation; social class; sex and race<sup>(6)</sup>. Consequently, structural determinants are those that interact between socioeconomic context and position and define the individual socioeconomic position within the hierarchies of power, prestige and access to resources in our society.

The intermediate determinants include material situations that include factors such as housing and quality of neighborhood, consumption potential and the physical work environment; psychosocial ones, which include psychosocial stressors, stressful life relationships, and social support and coping styles (or lack thereof); the behavioral and/or biological factors related to nutrition, physical activity, tobacco consumption and alcohol consumption, which are distributed differently between different social groups and influenced by genetic factors; the health system as a social determinant relevant to access, which incorporates differences in exposure and vulnerability through inter-sectoral actions conducted in the health sector. The health system plays an important role in mediating the differential consequences of the disease in people's lives<sup>(6)</sup>.

Thus, we have that DSS can affect the appearance of NCDs and its risk factors, which also contribute to the worsening of the disease and its complications over time. However, there are resources that can be exploited by the health

sector to minimize the consequences, in particular, premature mortality. And, based on national and international studies on premature mortality due to NCDs and social inequality, we propose the present investigation. This study aims to identify the available scientific evidence on DSS related to premature mortality from NCDs.

## METHOD

It is a study of literature review using the scoping review method<sup>(7)</sup>, which comprises a set of techniques with the purpose of summarizing the knowledge on a given research topic. This study followed the steps provided for in a scoping review: 1) identification of the research question or questions; 2) identification of relevant studies; 3) selection of studies; 4) data extraction; 5) synthesis and description of the results and 6) dissemination. The review was carried out from April 10 to July 12, 2020, in the following steps:

1. Identification of the research question: the research question was identified as: "What evidence is available in the literature on DSS related to premature mortality from NCDs?"

2. Identification of relevant studies: the bibliographic search was performed in the following databases: Medical Literature Analysis and Retrieval System Online (MEDLINE), Cumulative Index to Nursing and Allied Health literature (CINAHL) and Web of Science and in the Scientific Electronic Library libraries Online (SciELO) and Virtual Health Library (VHL). The inclusion criteria were articles and official documents, in Portuguese, English and Spanish, published between 2007 and 2020. The research strategies carried out are presented in Chart 1.

3. Selection of studies: the studies were selected from the analysis of the title, followed by reading the abstract and, finally, by reading the entire article. This step was carried out through independent reading and by peers to maintain methodological rigor.

4. Data extraction: the selected studies were analyzed as proposed by the WHO of a structural concept of the DSS Commission and were divided into two classes, namely: structural DSS and intermediate DSS<sup>(6)</sup>.

**Chart 1.** Database and search strategy.

<p><b>Descriptors of MEDLINE</b></p> <p>Search (((("Chronic Disease"[Mesh Terms] OR "Disease, Chronic" OR "Diseases, Chronic" OR "Chronic Illness" OR "Chronic Illnesses" OR "Illness, Chronic" OR "Illnesses, Chronic" OR "Chronically Ill")) AND ("Mortality, Premature"[Mesh Terms] OR "Premature Mortalities" OR "Premature Death" OR "Deaths, Premature" OR "Premature Deaths" OR "Premature Mortality" OR "Death, Premature")) AND ("Social determinants of health"[Mesh Terms] OR "Health Social Determinant" OR "Health Social Determinants" OR "health inequalities" OR "health inequities" OR "health inequality" OR "health disparity" OR "health disparities" OR "socioeconomic health inequalities" OR "social health inequalities" OR "Healthcare disparities" OR "Health Disparities" OR "Social Health Inequalities" OR "Socioeconomic Inequalities in health" OR "social inequality in health" OR "Vulnerable Populations" OR "Population, Vulnerable"))</p> <p>Database and search strategy.Filters: Scientific papers in English, Spanish or Portuguese; published from 2007-2020.</p>
<p><b>Descriptors of CINAHL</b></p> <p>("Chronic Disease" OR "Disease, Chronic" OR "Diseases, Chronic" OR "Chronic Illness" OR "Chronic Illnesses" OR "Illness, Chronic" OR "Illnesses, Chronic" OR "Chronically Ill") AND ("Mortality, Premature" OR "Premature Mortalities" OR "Premature Death" OR "Deaths, Premature" OR "Premature Deaths" OR "Premature Mortality" OR "Death, Premature") AND ("Social determinants of health" OR "Health Social Determinant" OR "Health Social Determinants" OR "health inequalities" OR "health inequities" OR "health inequality" OR "health disparity" OR "health disparities" OR "socioeconomic health inequalities" OR "social health inequalities" OR "Healthcare disparities" OR "Health Disparities" OR "Social Health Inequalities" OR "Socioeconomic Inequalities in health" OR "social inequality in health" OR "Vulnerable Populations" OR "Population, Vulnerable")</p> <p>Filters: Scientific papers in English, Spanish or Portuguese; published from 2007-2020.</p>
<p><b>Descriptors of Web of Science</b></p> <p>("Chronic Disease" OR "Disease, Chronic" OR "Diseases, Chronic" OR "Chronic Illness" OR "Chronic Illnesses" OR "Illness, Chronic" OR "Illnesses, Chronic" OR "Chronically Ill") AND ("Mortality, Premature" OR "Premature Mortalities" OR "Premature Death" OR "Deaths, Premature" OR "Premature Deaths" OR "Premature Mortality" OR "Death, Premature") AND ("Social determinants of health" OR "Health Social Determinant" OR "Health Social Determinants" OR "health inequalities" OR "health inequities" OR "health inequality" OR "health disparity" OR "health disparities" OR "socioeconomic health inequalities" OR "social health inequalities" OR "Healthcare disparities" OR "Health Disparities" OR "Social Health Inequalities" OR "Socioeconomic Inequalities in health" OR "social inequality in health" OR "Vulnerable Populations" OR "Population, Vulnerable")</p> <p>Filters: Scientific papers in English, Spanish or Portuguese; published from 2007-2020.</p>
<p><b>Descriptors SciELO and BVS</b></p> <p>(Doença Crônica OR Chronic Disease OR Casos Crônicos OR Quadros Crônicos OR Doenças Crônicas OR Moléstia Crônica OR Doença Degenerativa OR Doenças Degenerativas) AND (Mortalidade Prematura OR Mortality, Premature) AND (Determinantes Sociais da Saúde OR Social Determinants of Health OR Desigualdade em Saúde OR Iniquidade na Saúde OR Desigualdade em Saúde OR Saúde e Desigualdade OR Desigualdade na Saúde OR Iniquidade Social OR Vulnerabilidade Social OR Vulnerabilidade em Saúde)</p> <p>Filters: Scientific papers in English, Spanish or Portuguese; published from 2007-2020.</p>

5. Synthesis and description of the results: the work used the conceptual and theoretical model of the WHO DSS Commission. The studies were synthesized and described according to the class of structural DSS and intermediate DSS of the model. The structural DSS are related to: political and socioeconomic context (PSC) that encompass PSC-A: Governments that include definitions of needs, participation of society and transparency in public administration; PSC-B: Macroeconomic policy that includes fiscal,

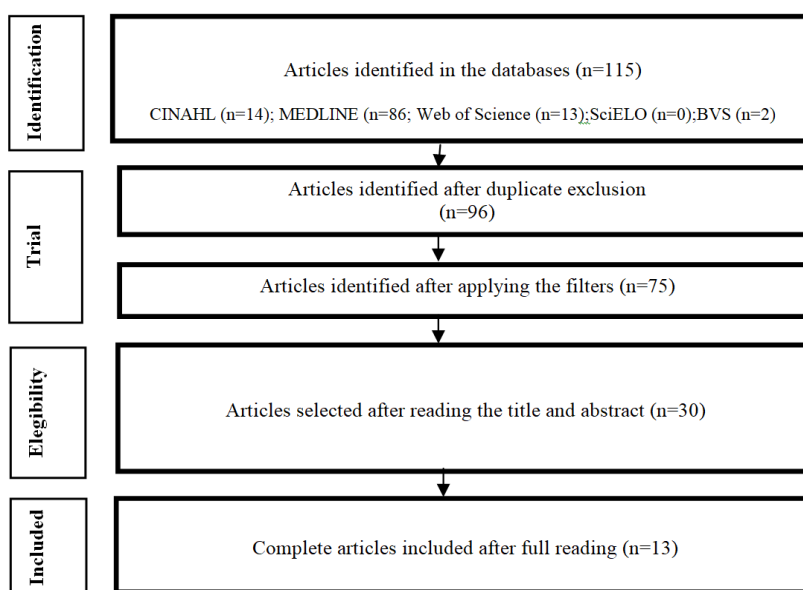
monetary, trade policies and influences the labor market; PSC-C: Social policies that affect factors that influence work, social assistance, land distribution and housing; PSC-D: Public policies in other areas of society, such as education, health care and sanitation; PSC-E: Culture and social values<sup>(6)</sup> and Socioeconomic position (SEP) involves social class (SEP-A); sex (SEP-B); Ethnicity/race (PSE-C); education (SEP-D); occupation (SEP-E) and income (SEP-F)<sup>(6)</sup>. The intermediate DSS are divided into:

Material circumstances (MC); Psychosocial circumstances (PC); Behavioral and/or biological factors (BBF); The health system itself as a social determinant (PSS)<sup>(6)</sup>. Finally, we sought to analyze which are the most studied social determinants of health in premature mortality due to NCDs.

As this is a literature review using the scoping review method, there is no need for an ethical opinion to carry out the study.

## RESULTS

Of the 115 articles identified in the MEDLINE, CINAHL, Web of Science and VHL library databases, after excluding duplicates and applying the filters, 75 articles remained. After reading the titles and abstracts, 30 articles were selected for full reading. Finally, 13 articles were included in this review. No articles were found in the SciELO virtual library (Figure 1).



**Figure 1.** Flowchart of the selection process of published articles for the scoping review.

About the 13 articles, one article was published in 2017, four in 2016, three in 2014, one in 2015, 2011, 2010, 2009 and 2008, respectively. According to the geographical distribution by continent, five articles were published in European countries, three in Africa, two in South America, two in North America, and one worldwide. As for the study design, ten are observational, with secondary data source, two cohorts and one ecological study (Chart 2).

Regarding the analysis of the structural DSS, the socioeconomic position is highlighted in eleven studies. The most prevalent was race (SEP-C)<sup>(13,16,18,20)</sup> and sex (SEP-B)<sup>(12,17-19)</sup> in four studies, followed by education (SEP-D)<sup>(10, 12,19)</sup> in three studies, income (SEP-F)<sup>(8,9)</sup> in two studies and social class (SEP-A)<sup>(11)</sup> in one study. Four studies showed that males had a higher number of deaths and premature mortality rates.

This result shows that men are more vulnerable to premature death<sup>(12,17-19)</sup>.

Regarding ethnicity/race, the literature showed divergences about this determinant. A study carried out in the United States<sup>(13)</sup> showed a greater reduction in mortality in non-white individuals, while another study in the same country showed an increase in premature mortality in white people and Native Americans, and a reduction in blacks and Asians people<sup>(20)</sup>.

With regard to education and premature mortality from NCDs, studies show that individuals with less education are twice as likely to die prematurely in the European continent<sup>(13)</sup> and this also occurs with premature mortality rates in a developed country<sup>(19)</sup>.

When analyzing income, it was found that individuals with lower income had higher premature mortality<sup>(8)</sup>; however, those ones with

greater purchasing power tend to have more risk factors for NCD mortality<sup>(9)</sup>.

The political and socio-economic context of the social determinants of structural health was analyzed in two articles. In the first, the control of risk factors was evaluated through public policies with the improvement of health education and medical assistance. Macroeconomic policies included taxation and reduced advertising in the media regarding the use of tobacco and alcohol<sup>(14)</sup>. Another study focused only on public policies, in particular, on improving the quality of health information on risk factors and health information systems. This

was aimed at knowing the burden of premature mortality due to NCDs and proposing the implementation of actions to reduce it<sup>(15)</sup>.

Regarding the intermediary social determinants of health, 13 studies addressed housing, the quality of the neighborhood, the work environment, stressful life relationships, behavioral factors and the health system<sup>(4)</sup>. These studies pointed out the challenges regarding their use, especially in developing countries due to the poor quality of health information systems<sup>(9,12,16)</sup>.

Chart 2 shows the authors, place and objective, study design, DSS and results of the 13 articles analyzed.

**Chart 2.**Resources of selected articles for the *scoping review*.

Reference	Place and objective	Study design	Social determinants of health studied	Results
Bassanesi SL, et al (2008) <sup>(8)</sup>	Brazil Objective: to investigate the relationship between early mortality from cardiovascular disease and socioeconomic conditions.	Ecological study. Level of evidence 2c.	Structural determinants: Socioeconomic position - income (SEP-F).	The estimated risk of premature mortality from early cardiovascular disease in the neighborhood with the best socioeconomic status was 123.1/100,000, and in the neighborhood with the worst situation it was 402.5/100,000.
Schneider M, et al (2009) <sup>(9)</sup>	South Africa Objective: to compare premature mortality in rich and poor areas associating it with poverty, risk factors and the health system in adults.	Observational study with secondary data source. Level of evidence 2c.	Structural determinants: Socioeconomic position - income (SEP-F).	Non-communicable Chronic diseases were responsible for 39% and 33% of premature mortality in rich and poor districts, respectively. The risk factors for hypertension and obesity grew with increasing wealth, while most lifestyle factors, such as light smoking, domestic exposure to smokeless fuels and alcohol dependence were associated with poverty.
Stirbu I (2010) <sup>(10)</sup>	Europe Objective: to estimate the magnitude of educational inequalities in avoidable mortality in different European countries.	Observational study with secondary data source. Level of evidence 2c.	Structural determinants: Socioeconomic position - education (SEP-D).	For cardiovascular diseases for all countries in the study, the relative index of inequality associated with education was 3.24, in countries with low education such as Hungary and the Czech Republic this index increased to 6.08 and 6.02 respectively. Inequalities in preventable premature mortality were present in all European countries, where educational inequalities point to an important role for health services in reducing health inequalities.

**To be continued**

Reference	Place and objective	Study design	Social determinants of health studied	Results
Exeter DJ, et al (2011) <sup>(11)</sup>	Scotland Objective: to analyze inequalities and premature mortality.	Observational study with secondary data source. Level of evidence 2c.	Structural determinants: Socioeconomic position - social class (SEP-A).	The standardized premature mortality rate in economically better areas went from 248.3 per 100,000 inhabitants between 1980 and 1982 to 139.2 from 1999 to 2001, whereas in poorer regions it went from 375.8 to 255.1 per 100,000 inhabitants in the same period.
Arroyave I, et al (2014) <sup>(12)</sup>	Colombia Objective: to examine the disparity in premature adult mortality (ages 25 to 64) by educational level from 1998 to 2007 in Colombia.	Observational study with secondary data source. Level of evidence 2c.	Structural determinants: Socioeconomic position - sex (SEP-B) and education (SEP-D).	Men and women with only primary education had higher premature mortality than men and women with secondary education due to diseases of the cardiovascular system, presenting RR of 1.88 and 2.81 for men and women with primary education, while people with secondary education have RR of 1.54 and 1.67 respectively.
Jones K, et al (2014) <sup>(13)</sup>	United States Objective: to examine premature mortality rates by city and race.	Observational study with secondary data source. Level of evidence 2c.	Structural determinants: Socioeconomic position - race (SEP-C).	Premature mortality in North Carolina was reduced by 13.3% for the population as a whole, 26.6% for non-whites and 7.2% for whites.  For the health of whites, public actions and policies are necessary to prevent smoking, suicide and injuries. In the non-white population, programs should focus on preventing stroke, cardiovascular disease, diabetes, homicide and kidney disease.
Kontis V, et al (2014) <sup>(14)</sup>	World Objective: to analyze the potential impact of reducing six preventable risk factors on future trends in premature mortality from chronic non-communicable disease.	Observational study with secondary data source. Level of evidence 2c.	Structural determinants: Political and socioeconomic context (PSC) - Macroeconomic policy (PSC-B) and Public policies (PSC-D).	If the goals agreed between countries through WHO for the reduction of the six risk factors (smoking, alcohol use, salt intake, obesity, high blood pressure and increased glucose) were achieved between 2010 and 2025, the likelihood of a premature death from this type of disease will decrease by 22% in men and 19% in women, compared with a reduction of 11% in men and 10% in women if the goals are not achieved.
Santosa A, et al (2015) <sup>(15)</sup>	Sweden Objective: to analyze the reduction of premature mortality from chronic non-communicable diseases.	Retrospective longitudinal study. Level of evidence 2b.	Structural determinants: Political and socioeconomic context (PSC): Public policies (PSC-D).	Sweden has demonstrated that the goal of a 25% reduction in premature mortality from chronic non-communicable disease can be achieved over a period of 15 years even in a country in late epidemiological transition through public policies to improve health information systems, and control of risk factors, especially the use of tobacco and alcohol.

To be continued

Reference	Place and objective	Study design	Social determinants of health studied	Results
Nojilana B, et al (2016) <sup>(16)</sup>	South Africa Objective: to analyze the trend of mortality for chronic non-communicable diseases.	Observational study with secondary data source. Level of evidence 2c.	Structural determinants: Socioeconomic position - race (SEP-C).	The rate of premature mortality from chronic non-communicable disease decreased between 1997 and 2010 in South Africa. Blacks had 1.3 higher mortality rates when compared to whites. The socioeconomic position contributes to premature mortality.
Muller DC, et al (2016) <sup>(17)</sup>	Europe Objective: to analyze the modifiable causes of premature mortality in Western Europe.	Prospective cohort. Level of evidence 1b.	Structural determinants: Socioeconomic position - sex (PSE-B). Intermediate determinants: Behavioral and/or biological factors: (FCB)	There are differences between the female and male sex for the premature mortality of smokers. The female gender presented an OR of 2.16 and the male gender of 2.57. Differences were also reported for males, with values for the variables body mass index, smoking, diet and alcohol being higher compared to females.
Morey F, et al (2016) <sup>(18)</sup>	Belize Objective: to investigate disparities in premature adult mortality according to ethnicity and sex.	Observational study with secondary data source. Level of evidence 2c.	Structural determinants: Socioeconomic position - sex (SEP-B) and race (SEP-C).	For chronic non-communicable diseases, the probability of premature mortality was between 3.5% and 8.2% between the Mayan and Mestizo groups, and between 13.8% and 20.1% between races. The male gender had higher specific premature mortality rates in the four races compared to the female gender.
Renard F, et al (2016) <sup>(19)</sup>	Belgium Objective: to evaluate educational differences with premature mortality.	Observational study with secondary data source. Level of evidence 2c.	Structural determinants: Socioeconomic position - sex (SEP-B) and education (SEP-D).	Structural determinants: Socioeconomic position - sex (SEP-B) and education (SEP-D). The rates of premature mortality in Belgium between 1990 and 2000 were higher for males. When relating premature mortality and education, the group with higher education had lower rates in both sexes. In the 2000s, men with higher education had a rate of 316.4 premature deaths per 100 thousand inhabitants and those with less education 595.3. In women, the difference was 191.3 for those with more years of study and 304.8 for those with less years of study.
Shiels MS, et al (2017) <sup>(20)</sup>	United States Objective: to analyze trends in premature mortality between 1999 and 2014 by age, sex, race and ethnicity.	Observational study with secondary data source. Level of evidence 2c.	Structural determinants: Socioeconomic position - race (SEP-C).	Between 1999 and 2014, premature mortality increased in white individuals and in American Indians and Alaskan natives. There was a decrease in Hispanic individuals (up to 3.2% per year), black individuals (up to 3.9% per year) and Asians and in the Pacific Islands (up to 2.6% per year).

## DISCUSSION

Studies on DSS related to premature mortality due to NCDs have presented a greater

number of publications since 2014, mainly from Europe.

The DSS most mentioned in the articles was sex<sup>(12,17-19)</sup>, showing a strong relationship

between this determinant and premature mortality due to NCDs. A study carried out in European Union member countries between 2000 and 2016 showed a decrease in premature mortality from NCDs of 2.14% per year in males and 1.64% in females, and premature mortality rates are higher in men when compared to women in all years<sup>(21)</sup>.

Therefore, considering gender differences in relation to chronic diseases and dependence on family care at home is essential to support the planning and provision of care centered on the needs of the patient and his family<sup>(22)</sup>, which can impact on reducing the premature mortality from NCDs.

Another outstanding DSS refers to the disparity between races<sup>(13,16,18,20)</sup>. Individuals of black race or other races with a low statistical value in the studies, have a higher risk of developing and dying due to NCDs. A study carried out in 2016 found that the mortality rate due to NCDs in South Africa is 1.3% higher for black people compared to white ones<sup>(23)</sup>. And, a study carried out in the United States showed that black individuals die more than whites, with regard to historical factors, since the socioeconomic level of the black population is lower<sup>(24)</sup>.

Access to education is also an important SDH, which carries a higher risk of premature mortality from NCDs. A study carried out in Italy showed that high schooling is associated with lower mortality from cardiovascular and chronic respiratory diseases and the educational level are different between genders and marital status<sup>(25)</sup>.

Social class was also related to premature mortality<sup>(11)</sup>. A study that assessed the inequality in premature mortality in England indicated that the low economic position is associated with its increase and points out that public policies are needed to reduce these inequalities that influence the access and quality of health care provided<sup>(26)</sup>.

Most studies were carried out in developed countries, with emphasis on the United States<sup>(13,20)</sup> and other European countries, such as Scotland<sup>(11)</sup> and Belgium<sup>(19)</sup>, which ratify concern with the local health system in relation to the NCDs. This concern occurs because countries, especially in northern Europe, are at a late stage of the epidemiological transition and

have already reached the WHO goals of reducing premature NCD mortality by 25%<sup>(15)</sup>. While another study carried out in the United States shows an unusual increase in premature mortality due to NCDs, even though it is a high-income country, and this process occurs in some specific ethical groups, with emphasis on white individuals, American Indians and Alaskan natives<sup>(20)</sup>.

All DSS referring to the economic position have an influence on the intermediate DSS, which are material circumstances<sup>(8-13,16-20)</sup>. It is recognized that people of low social class and with socially devalued occupation will have greater difficulties in improving their quality of life. However, intermediate determinants were found in only one study<sup>(17)</sup>.

The structural determinants of the political and socioeconomic context are addressed in relation to macroeconomic policies<sup>(14)</sup> and public policies<sup>(14,15)</sup> that aim to reduce gender, social class and race disparities, among others. The strategies mentioned refer to effective actions, which include equitable development and education programs for children; removing barriers to guarantee employment in disadvantaged groups; comprehensive strategies for controlling tobacco and alcohol and reducing dietary salt; high quality primary care for preventive interventions and early detection and treatment of NCDs and improved access to health services<sup>(26)</sup>.

In this direction, we have the review that addressed the concept of DSS, its theoretical basis and application in selected studies, which demonstrated a causal link with NCDs. It was reported that, currently, we have more research on how society can make the individual sick or promote their health; but the next step is to refine studies on the causes and consequences of this phenomenon and highlight three main areas of study, the disadvantage of the neighborhood, the social networks and the perceived discrimination<sup>(27)</sup>.

These clues, added to the results obtained in this review, may contribute to health surveillance with regard to premature mortality due to NCDs. Evidencing the DSS predominantly related to these mortality rates foster elements for the elaboration of public health policies, with a view to minimizing the



social, political and economic effects, through preventive and health promotion actions.

## CONCLUSION

DSS influence the socioeconomic position of individuals and, as a result, they can lead to premature mortality due to NCDs, as a condition

of unhealthy living habits, hindering access to education and, therefore, worse occupations in the labor market, which creates inequities in access to health. Sex, education and income are social determinants that impose new challenges on health professionals for the implementation of public policies and for health surveillance, in relation to premature mortality due to NCDs

## OS DETERMINANTES SOCIAIS E A MORTALIDADE PREMATURA POR DOENÇA CRÔNICA NÃO TRANSMISSÍVEL: UM SCOPING REVIEW

### RESUMO

**Objetivo:** identificar as evidências científicas disponíveis sobre os determinantes sociais da saúde, relacionados à mortalidade prematura por doenças crônicas não transmissíveis. **Método:** trata-se de um estudo de revisão da literatura utilizando o método *scoping review*, o qual foi realizado no período de 10 de abril a 12 de julho de 2020, nas seguintes bases de dados: *Medical Literature Analysis and Retrieval System Online* (MEDLINE), *Cumulative Index to Nursing and Allied Health literature* (CINAHL), e *Web of Science* e nas bibliotecas *Scientific Electronic Library Online* (SciELO) e *Biblioteca Virtual em Saúde* (BVS). Foram utilizadas as etapas de identificação e seleção dos estudos; mapeamento dos dados; confrontação e discussão dos resultados. **Resultados:** evidenciou-se, pelos 13 artigos analisados, que a mortalidade prematura por doença crônica não transmissível está fortemente relacionada aos determinantes sociais da saúde, com destaque ao sexo masculino, escolaridade e renda. **Conclusão:** os resultados impõem novos desafios aos profissionais de saúde para implementação de políticas públicas e contribuem para a vigilância em saúde, em relação a mortalidade prematura por doenças crônicas não transmissíveis.

**Palavras-chave:** Iniquidade Social. Mortalidade Prematura. Doença Crônica. Saúde Pública.

## LOS DETERMINANTES SOCIALES Y LA MORTALIDAD PREMATURA POR ENFERMEDAD CRÓNICA NO TRANSMISIBLE: UNSCOPING REVIEW

### RESUMEN

**Objetivo:** identificar las evidencias científicas disponibles sobre los determinantes sociales de la salud, relacionados a la mortalidad prematura por enfermedades crónicas no transmisibles. **Método:** se trata de un estudio de revisión de la literatura, utilizando el método *scoping review*, que fue realizado en el período de 10 de abril a 12 de julio de 2020, en las siguientes bases de datos: *Medical Literature Analysis and Retrieval System Online* (MEDLINE), *Cumulative Index to Nursing and Allied Health literature* (CINAHL), y *Web of Science* y en las bibliotecas *Scientific Electronic Library Online* (SciELO) y *Biblioteca Virtual em Saúde* (BVS). Fueron utilizadas las etapas de identificación y selección de los estudios; mapeo de los datos; confrontación y discusión de los resultados. **Resultados:** se evidenció, por los 13 artículos analizados, que la mortalidad prematura por enfermedad crónica no transmissible está fuertemente relacionada a los determinantes sociales de la salud, con destaque al sexo masculino, escolaridad y renta. **Conclusión:** los resultados imponen nuevos desafíos a los profesionales de salud para implementación de políticas públicas y contribuyen para la vigilancia en salud, respecto a la mortalidad prematura por enfermedades crónicas no transmisibles.

**Palabras clave:** Inequidad Social. Mortalidad Prematura. Enfermedad Crónica. Salud Pública.

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