

Impact of Social Determinants of Health on Head and Neck Cancer in Quilombola Communities in Western Pará: Systematic Review.

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Citation

Livia de Aguiar Valentim, Tatiane Quaresma, Julianne de Figueiredo Costa, Sheyla Oliveira, Franciane Fernandes, Leanna Aquino. Impact of Social Determinants of Health on Head and Neck Cancer in Quilombola Communities in Western Pará: Systematic Review.. PROSPERO 2024 Available from <https://www.crd.york.ac.uk/PROSPERO/view/CRD42024580917>

REVIEW TITLE AND BASIC DETAILS

Review title

Impact of Social Determinants of Health on Head and Neck Cancer in Quilombola Communities in Western Pará: Systematic Review.

Original language title

Impacto dos Determinantes Sociais de Saúde no Câncer de cabeça e Pescoço em Comunidades Quilombolas do Oeste do Pará: Revisão Sistemática.

Review objectives

PICO Strategy: P: Quilombola population in the municipality of Santarém. I: Exposure to social determinants of health (DSS) such as alcoholism, smoking, access to health services, socioeconomic and environmental conditions. C: Comparison with other populations or with those that are not exposed to the same DSS. O: Development of Head and Neck Cancer.

SEARCHING AND SCREENING

Searches

Articles available in the databases will be used: ScienceDirect, PubMed, LILACS, Web of Science, Scopus, published from 2019 to 2024

Study design

The review will include various study designs to explore the impact of social determinants of health on head and neck cancer in Quilombola communities.

Observational studies such as cohort, case-control, and cross-sectional studies, as well as qualitative research, will be included. Systematic reviews and meta-analyses that provide empirical data on the relationship between social determinants and cancer risk in Quilombola populations are also eligible.

The review will exclude studies that do not offer primary data, such as editorials, commentaries, and narrative reviews. Randomized controlled trials (RCTs) will be excluded unless they specifically address social determinants related to cancer in Quilombola communities. Studies published outside the 2019-2024 timeframe or without free full-text access will also be excluded.

ELIGIBILITY CRITERIA

Condition or domain being studied

The systematic review focuses on the impact of social determinants of health (SDH) on the development of head and neck cancer among Quilombola communities in Western Pará, Brazil. Quilombola populations, descendants of African slaves, often live in remote areas with limited access to healthcare services. The review will explore how factors such as smoking, alcohol consumption, socioeconomic conditions, and environmental exposures contribute to the risk of developing head and neck cancers in these communities. This healthcare domain is of particular interest because Quilombola populations face significant health disparities, including higher rates of tobacco use compared to other populations, which increases their vulnerability to cancer. The review aims to highlight the need for targeted public health interventions and improved access to healthcare for these marginalized communities.

Population

The review focuses on the Quilombola communities in Western Pará, Brazil, as the primary population under study. These communities consist of descendants of African slaves who often reside in geographically isolated areas with limited access to healthcare services.

The review will include studies that specifically address Quilombola populations and examine the role of social determinants of health (SDH) as risk factors for the development of head and neck cancer. The studies must provide data on how factors such as smoking, alcohol consumption, socioeconomic status, and environmental exposures impact the health of Quilombola communities.

Studies will be excluded if they do not specifically focus on Quilombola populations or do not provide relevant data on the relationship between social determinants of health and head and neck cancer. Additionally, studies that are purely theoretical or do not include empirical data, as well as those that focus on populations outside the specified region, will be excluded. The review will also exclude studies that do not offer full-text access or are published outside the specified timeframe of 2019 to 2024.

Intervention(s) or exposure(s)

The review examines social determinants of health (SDH) as exposures that influence the development of head and neck cancer in Quilombola communities in Western Pará, Brazil.

These exposures include factors like smoking, alcohol consumption, socioeconomic status, and environmental conditions.

The review includes studies that provide empirical data on how modifiable risk factors (e.g., smoking, alcohol use) and socioeconomic factors (e.g., income, education, healthcare access) impact the risk of head and neck cancer in Quilombola populations. Environmental exposures such as living conditions and pollutants are also considered.

Studies will be excluded if they do not focus on the specified SDH or lack relevant data linking these determinants to cancer outcomes in Quilombola communities. Non-modifiable risk factors, like genetic predispositions, are excluded unless they interact with the social determinants being reviewed. Only studies from 2019 to 2024 with comprehensive data will be considered.

Comparator(s) or control(s)

Not applicable

OUTCOMES TO BE ANALYSED

Main outcomes

The main outcome of the review is the development of head and neck cancer among Quilombola communities, influenced by social determinants of health (SDH). This outcome is defined as the incidence or prevalence of head and neck cancers, including oral, laryngeal, pharyngeal, and salivary gland cancers, within these communities.

The outcome will be measured through the identification and analysis of studies reporting cancer cases linked to specific SDH, such as smoking, alcohol consumption, socioeconomic status, and environmental exposures. Measurements include statistical data on cancer incidence rates, relative risks, odds ratios, and any qualitative assessments that provide insights into how these determinants affect cancer risk.

The timing of these measurements varies by study but will generally focus on data collected within the past five years (2019-2024). This period is chosen to ensure that the findings are relevant to current public health conditions and reflect recent trends in cancer incidence related to SDH in these populations.

Additional outcomes

Not applicable

DATA COLLECTION PROCESS

Data extraction (selection and coding)

Studies will be selected for inclusion through a systematic process that begins with an initial screening of titles and abstracts to identify those that meet the inclusion criteria. This step focuses on studies addressing the impact of social determinants of health on head and neck cancer in Quilombola communities. Studies that do not align with these criteria will be excluded. Following the initial screening, full-text articles of the remaining studies will be reviewed in detail to confirm their relevance. Any discrepancies in the selection process will be resolved through

discussion among the reviewers, and a third reviewer will be consulted if needed. The selection process will be documented using a PRISMA flow diagram to record the number of studies screened, assessed for eligibility, and included in the final review.

Data will be extracted from the selected studies using a standardized data extraction form. The extracted data will include study characteristics (e.g., design, location, population), details of the social determinants examined, methods used to assess cancer risk, and the main outcomes related to head and neck cancer. Quantitative data (e.g., incidence rates, risk estimates) and qualitative insights will both be captured.

Two independent reviewers will conduct the data extraction to ensure consistency and accuracy. Any discrepancies will be resolved through discussion or by involving a third reviewer. The extracted data will be recorded in a secure database, which will be used for systematic analysis and synthesis in the review.

Risk of bias (quality) assessment

The review will assess several key characteristics of the included studies to evaluate their quality and potential risk of bias. These characteristics include the study design, sample size, population characteristics, data collection methods, and the validity of the outcomes measured. To formally assess the risk of bias, the review will use the Critical Appraisal Skills Programme (CASP) checklist, which is a widely recognized tool for evaluating the quality of various study designs. The CASP tool will be applied to each study to assess methodological rigor, including the clarity of the research question, the suitability of the methodology, the robustness of the analysis, and the reliability of the results. The review will also consider potential sources of bias, such as selection bias, measurement bias, and reporting bias.

Each study will be rated based on these assessments, and the results will be systematically documented. This thorough evaluation ensures that the conclusions drawn in the review are based on high-quality evidence, providing reliable insights into how social determinants affect the risk of head and neck cancer in Quilombola communities.

PLANNED DATA SYNTHESIS

Strategy for data synthesis

In this review, data synthesis will be tailored to integrate both quantitative and qualitative findings related to the impact of social determinants of health (SDH) on head and neck cancer in Quilombola communities.

For quantitative data, a narrative synthesis will be conducted due to the anticipated heterogeneity in study designs, populations, and outcomes. This synthesis will involve summarizing the key findings from individual studies, identifying common patterns, and exploring relationships between different social determinants and cancer outcomes. When possible, quantitative results such as incidence rates, odds ratios, and relative risks will be pooled using meta-analytic techniques. However, if meta-analysis is not feasible due to significant variability across studies, results will be presented descriptively, emphasizing trends and differences across the data.

For qualitative data, a thematic synthesis will be employed. This will involve coding qualitative findings from the included studies to identify recurring themes related to barriers and facilitators of healthcare access and cancer prevention in Quilombola communities. These themes will be synthesized to develop a comprehensive understanding of the lived experiences of these

populations in relation to the social determinants impacting their health outcomes.

The results from both quantitative and qualitative syntheses will be integrated to provide a holistic view of how SDH affect head and neck cancer risk in Quilombola communities. This mixed-methods approach allows for a nuanced understanding that combines statistical evidence with contextual insights, ensuring that the review captures the complexity of the issue.

Analysis of subgroups or subsets

Not applicable

REVIEW AFFILIATION, FUNDING AND PEER REVIEW

Review team members

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Funding source

not applicable

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TIMELINE OF THE REVIEW

Review timeline

Start date: 30 August 2024. End date: 30 December 2024

Date of first submission to PROSPERO

18 August 2024

Date of registration in PROSPERO

29 August 2024

CURRENT REVIEW STAGE

Publication of review results

The intention is not to publish the review once completed.

Stage of the review at this submission

Review stage	Started	Completed
Pilot work		
Formal searching/study identification		
Screening search results against inclusion criteria		
Data extraction or receipt of IP		
Risk of bias/quality assessment		
Data synthesis		

Review status

The review is currently planned or ongoing.

ADDITIONAL INFORMATION

PROSPERO version history

- Version 1.1 published on 29 Aug 2024
- Version 1.0 published on 29 Aug 2024

Review conflict of interest

None known

Country

Brazil

Medical Subject Headings

Alcoholism; Head and Neck Neoplasms; Health Services Accessibility; Humans; Smoking; Social Determinants of Health; Social Factors

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