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## INTRODUCTION

According to WHO estimates (2011), cancer has become the leading cause of death, ahead of coronary heart disease and stroke (FERLAY et al., apud WHO, 2015). Até 2025, mais de 20 milhões de novos casos de câncer serão diagnosticados a cada ano (STEWART; WILD, 2014). Until the year 2025, more than 20 million new cases of cancer will be diagnosed each year. Lung cancer has become the most common in the world and the latest worldwide estimate pointed to an incidence of 1.82 million new cases for 2012. According to these authors, the geographical patterns of mortality closely follow those of incidence, due to the high lethality associated with the disease. In Brazil, the National Cancer Institute José de Alencar Gomes da Silva (INCA) estimates for the biennium 2016/2017, 600 thousand new cases of cancer, with the exception of non-melanoma skin cancer, 28,220 of which refer to new cases of lung cancer (17,330 in men and 10,890 in women) (INCA, 2016). A study carried out at INCA (Souza, 2012) with lung cancer patients identified a small group of patients with stage I tumors, however, it was not possible to understand the causes that led the patients to have been diagnosed early. The present study is justified by the need to understand what were the determining factors for this diagnosis.

## GENERAL PURPOSE

To understand the determinant causes of the positive diagnosis of lung cancer in patients in stage I, at an oncology treatment institute in Rio de Janeiro.

## THEORETICAL FOUNDATION

According to the Australian philosopher John L. Mackie (1965), the idea of cause almost always includes several elements that contribute to the production of the effect. Therefore, cause is a set of things that in isolation are neither necessary nor sufficient for that purpose. When one of the components is needed for the sufficient set of elements, then we are facing an INUS condition when one of the components is needed for the sufficient set of elements, then we are facing an INUS condition (Insufficient, Necessary, Unnecessary, Sufficient). We say that an event is not necessary and not sufficient when we observe that an isolated cause is neither necessary nor sufficient for that purpose. Therefore, the cause is not necessary because there are other causes that may contribute to the same effect. And it is also not enough because there must be another event (s) to cause the effect. However, when the event is a result of a set of factors that occurs under certain circumstances, the event becomes necessary and sufficient for that purpose. That is because the event is considered INUS.

## REFERENCES

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## METHODOLOGICAL FOUNDATION

It is a qualitative research, based on the hermeneutic-dialectic approach, which is based on understanding and implies interpreting, establishing relations and drawing conclusions. Dialectic focus implies dialogue between opposing ideas and transformation of social reality. The conjunction of these two approaches allows a process, at the same time, of understanding, of critical analysis and of intervention of social reality. The project was approved in the CEP of INCA on protocol number 314.938 at 07/04/2013. The study included fifteen patients with primary lung cancer in stage I (IA and IB) treated at INCA, enrolled between January 2012 and July 2015. The selected patients who accepted to participate in the study signed the Free and Informed Consent Term (TCLE). Patients with advanced stage and with more than one non-localized primary tumor in the lung were excluded. The documentary analysis was done in the first stage of the study. Semi-structured interviews were carried out in the second stage. The third step involves the following steps: comprehensive reading, organization and analysis of the empirical material and elaboration of a synthesis between the empirical data and the theoretical reference of the study.

## PARCIAL RESULTS

Fourteen interviews were transcribed, totaling two hundred and nineteen pages. From the analysis and interpretation of the data, three main empirical categories were identified: “Accidental causes determining early diagnosis” (set of fortuitous events that enabled early diagnosis), “non-accidental causes determining early diagnosis” (set of specific events that enabled early diagnosis) and contribution to the cause of early diagnosis (measures or actions taken that facilitated early diagnosis). Eight empirical subcategories were also identified: *Signals*: (Clinical manifestations visible and perceptible by the health professional or another person); *Symptoms*: (subjective manifestations perceived by the patient and reported to the health professional); Identifying the need to seek medical care (perception of physical vulnerability and understanding of the need to seek medical care); *Diagnostic exams* (performing imaging tests and complementary tests for diagnosis or diagnostic confirmation); *Referral to tertiary/quaternary unit* (referral to the specialized unit for cancer treatment); Exam admission/dismissal (periodic medical examinations as a safety measure of the company, prior to the hiring or dismissal of the employee); *Collaboration and guidance of the family network / friends / doctor to access in health facilities* (advice and support of people of different links to the search for medical care); *Periodic examinations* (conducting periodic medical examinations to monitor the workers' health).