

<LOST IN TOSCANA - Behavioral changes and psychological distress after the lockdown for Covid-19 in Tuscany, Lombardy and Italy: LOckdown and lifeSTyles IN Tuscany>

BACKGROUND The LOST IN TOSCANA project was born from a collaboration between the Institute of Clinical Physiology (CNR-IFC), the Oncological Network, Prevention and Research Institute (ISPRO), the Careggi University Hospital and the Regional Health Agency (ARS) with the aim of understanding changes in lifestyles and possible psychological distress deriving from the COVID-19 emergency and from the restrictions imposed on regulatory level.

The LOST IN TOSCANA project aims to collect data, through 2 follow-ups (surveys 2 and 3), comparable to the national ones collected by the study "LOckdown and LifeSTyles IN ITALY - LOST IN ITALY (survey 1), with a level of both regional and local (ASL) representativeness, with the aim of investigating how psychological conditions and lifestyles have changed in consideration of the emergency health situation that has affected the population, forcing it to social isolation as a function of the lockdown.

AIMS The main objective of the study is to evaluate the impact of the lockdown on psychological conditions and, consequently, on lifestyles in a representative sample of the adult population in the Tuscany Region as a whole, in the 3 Tuscan ASLs and in Italy. Secondary objective is to estimate the impact of the lockdown in terms of years of life lost or lived with disabilities (DALYs) due to the diseases associated with the lifestyles considered in the project. Scenarios aimed at reducing the risk factors most affected by the lockdown will also be hypothesized.

DESIGN AND METHODS OF THE STUDY The study design foresees two follow-up phases (at 6 and 12 months) of the study "LOST IN ITALY - LOckdown and lifeSTyles IN the ITALY", conducted in April 2020 by Istituto Mario Negri, ISPRO, ISS and San Raffaele on a sample of 6,000 participants extracted from the Doxa online panel, representative of the Italian population aged between 18 and 74 in terms of age, sex, socio-economic characteristics and geographical area.

The first survey made it possible to collect information on lifestyle habits, psychological distress and quality of life before and during the lockdown, such as to provide a baseline for subsequent data collections that will be carried out in the Tuscany region and in Italy.

The survey tool consists of an ad hoc questionnaire, optimized on the basis of bibliographic review and the identification of adequate psychometric scales. In addition to socio-demographic characteristics, detailed sections on anthropometric characteristics and current lifestyles, such as smoking habits, use of heat-not-burned tobacco products and electronic cigarettes, alcohol consumption and use of cannabis or other addictive substances, are also provided as well as sections on the practice of gambling, use of psychotropic drugs for non-medical purposes, quantity and quality of sleep, anxiety or depression and motor impulsivity, a characteristic linked to the use of substances.

In order to identify changes in lifestyles and associated factors before, during and after the lockdown, hierarchical models for repeated measures will be implemented, including statistical weights to ensure the representativeness of the sample.

The identification of possible causal relationships between psychological change or other socio-demographic, work or family variables and changes in lifestyles will also be examined through the implementation of mediation models. This analysis makes it possible to identify factors capable of explaining the changes in the endogenous variable, lifestyle in this case, not directly due to the exogenous variable, the lockdown in this case.

PRELIMINARY RESULTS Preliminary analyzes on the sample participating at the baseline survey, with a specific focus on the consumption of tobacco products and nicotine, showed a decrease in traditional cigarette smoking (from 23.3% to 21.9%) during the lockdown and a simultaneous increase in the use of heat-not-burned tobacco (from 4.0% to 4.5%) and electronic cigarettes (from 8.1% to 9.1%). At the same time, among the smokers of traditional cigarettes around 9% increased the number of cigarettes smoked daily (from 10.9 to 12.7). Improvement in smoking habits was found to be associated with young age, occasional smoking and unemployment, whilst worsening in habits was mainly associated with psychological distress.

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Keywords: consumptions, lifestyles, psychological distress, lockdown

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Other: the project was granted by Bando Ricerca COVID-19 Toscana
