Study Overview

In 2022, the Tobacco Control Data Initiative (TCDI) conducted a study to:

1. Assess the prevalence of tobacco use among patients with tobacco related illnesses TRIs),
2. Describe the tobacco use characteristics among patients with TRIs,
3. Determine the excess morbidity and mortality caused by tobacco use, and
4. Estimate the economic burden of TRIs.

To do so, the TCDI collected and analyzed data on the morbidity, mortality, and economic costs (healthcare costs, and productivity losses) associated with tobacco use in Kenya. The data for the tobacco-related morbidity and economic costs was collected by interviewing 2032 adult (18+) patients suffering from TRIs at 4 major national referral hospitals in Kenya. The TRIs included: myocardial infarction, cerebral vascular accident, peripheral arterial disease, oral-pharyngeal cancer, esophagus cancer, laryngeal cancer, lung cancer, chronic bronchitis, emphysema, tuberculosis, and nasopharyngeal cancer. Data on mortality was collected from the Civil Registration and Vital Statistics Unit within the Kenyan Ministry of Health. 60,228 deaths of adults aged 35+ (2012-2021) from TRIs were analyzed to calculate mortality directly attributable to tobacco use.

Study Highlights

Tobacco Use Among Patients Suffering from TRIs

2032 patients with selected TRIs were interviewed. Of these:

- Most (61%) were male.
- More men than women had TRIs except for those with cardiovascular diseases (CVDs) where the incidence among women was higher (55%) compared to men (45%).
- More than one third (38%) had Oral pharyngeal cancer.
- One in eight (12%) had nasopharyngeal cancer.
- One in 10 had lung cancer.

A history of tobacco use was reported in:

- Nearly half (46%) of patients surveyed.
  - 6% were current tobacco users (smoked and smokeless) and 40% were former users.
  - Current smokers smoked an average of 7.7 cigarettes per day.
  - 60% of current users had tried to quit within the previous 12 months.
- Nearly two thirds of patients with Laryngeal cancer (61%) and chronic bronchitis (60%).
- More than half of patients with Emphysema (54%), Peripheral arterial disease (53%).
- Nearly half of patients with Oral Pharyngeal cancer (49%).

Mortality

- **One in six (16.5%) deaths from TRIs (2012-2021) were attributable to smoking.**
  - 40% of these were due to respiratory diseases.
- **Smoking was attributable for:**
  - One in five cancer deaths.
  - More than one in ten (11.2%) cardiovascular deaths.
  - One In eight (13.4%) of tuberculosis deaths.
  - 5.5% of diabetes deaths.
- **The cancers most attributable to smoking were:**
  - Larynx = 70%
  - Trachea, lung, and bronchi = 59.6%
  - Lips, oral cavity, and pharynx = 50.5%

Economic Burden

- For every dollar accrued from tobacco revenue and tax, Kenya loses between USD 2.2 - 3 to costs associated with TRIs.
- TRIs were responsible for economic losses of between USD 544.72 million and USD 756.22 million.
  - Direct health care costs were USD 396.1 million.
  - Indirect costs (productivity loss) of between USD 148.6 million and USD 360.12 million.
- The cost per TRI case was highest for lung cancer (USD 23365) and lowest for Tuberculosis (USD 1044).
- Total economic losses were highest for myocardial infarction.

Policy Recommendations

1. Strengthen the implementation of the Framework Convention on Tobacco Control (FCTC) in Kenya.
2. Integrate robust cessation programs in health facilities, workplaces, educational institutions, and community settings.
3. Design tobacco control policies with an equity and gender perspective.
4. Utilize funds collected through the solatium compensatory contribution for cessation programs and healthcare costs related to managing TRIs.
5. Progressively increase tobacco taxes to reduce tobacco consumption and healthcare costs associated with tobacco consumption.