

Labels Impact Index (LII): an Italian version of a tool to assess the impact of advertisement on tobacco products.

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Abstract

The Labels Impact Index (LII) score is a tool to evaluate the impact of health warnings of tobacco products. This score was tested in France, Germany, the Netherlands and UK to measure the effectiveness of the text-only health warnings.

The present study aims to propose an Italian version of this tool to support future researches on the health warning and to facilitate the comparison using the same questions.

Four items are translated in Italian: salience, harm, quitting and forgo. The questionnaire includes one question for each item and a multiple-choice answer, to correspond a four/five-point scales, is available for each question. The LII score can vary from 0 to 28.

An international standardized tool, as the LII score, is fundamental to compare the impact of health warnings in different countries and to enforce policies to oppose the tobacco epidemic.

Keywords: *health warnings; tobacco; impact; effectiveness; questionnaires; product labelling; adult.*

Introduction

The literature underlines the differences in health tobacco warning effectiveness according to individuals' demographics and smoking behaviours [1-3].

Different aspects should be evaluated to assess the impact of the labels on tobacco products. The first one is the modality. Several studies compared different packaging: starting from text only, later analysing pictorial warnings and lastly standardised (plain) packages.

The second one concerns the outcomes. The effectiveness is often measured with different rates: reduction of consumption, quitting, not starting, delay starting, increased awareness, fear/anxiety, perceived risks and motivation to avoid smoking [4]. A third feature examines the target population. Female and younger smokers appear to be more involved by shock images. Also the shocking

warnings appear to be supporting those who want to quit smoking [5].

In Europe, several efforts have been made to examine the effectiveness of the health warning [6,7].

In this context a score to measure the effectiveness of the text-only health warnings was published in 2012. This tool, Labels Impact Index (LII), was tested using data using data of the four nationally representative samples of smokers from the International Tobacco Control (ITC) Project Europe Surveys in France, Germany, the Netherlands and the UK. Furthermore, the LII, as referred the authors, was born to understand the possible differential impact of tobacco control policies [8].

The aim of the present study is to propose an Italian version of this tool in order to support future researches on the health warning and to facilitate the comparison using the same questions.

Methods

The questionnaire, used to calculate LII score, was translated from English to Italian by two different researchers. A comparison of the two versions was conducted from a third one.

An opportunistic sample was involved to answer to the questionnaire and to note possible inconsistent or unclear questions.

The sample included current smokers (adults who have smoked 100 cigarettes in their lifetime and who currently smoke cigarettes) [9].

Results

The original LII questionnaire in English and the translated version in Italian, for current smokers, are reported in **Table 1**. The four translated items are:

- SALIENCE: attenzione (in Italian);
- HARM: danno (in Italian);
- QUITTING: smettere di fumare (in Italian);
- FORGO: rinuncia (in Italian).

The questionnaire includes one question for each item. Moreover, a multiple-choice answer, to correspond a four/five-point scales, is available for each question.

The formula to estimate the LII score according to Hitchman et al. [8] is:

$$\text{LII} = (\text{SALIENCE} \times 1) + (\text{HARM} \times 2) + (\text{QUITTING} \times 2) + (\text{FORGO} \times 3).$$

The score of the single items ranges from 1 to 4 or 5: the higher scores indicate high impacts.

The LII score varies from 8 to 33.

Discussion

Packaging and labelling of tobacco products represents one of the items taken into account by the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) in response to the globalization of the tobacco epidemic. In particular, Article 11 of the WHO FCTC recommended the pictorial health warnings on tobacco packages as a cost-effective measure to enhance the public awareness about the smoking effects [10].

Therefore, an international standardized tool, as the LII score, is essential not only to evaluate the effectiveness of the health warnings but especially to compare the effectiveness in different countries, according to implemented different tobacco policies.

In literature, other lifestyle were assessed using standardized questionnaire, such as International Physical Activity Questionnaires (IPAQ). IPAQ is used to evaluate the physical activity and inactivity [11]. Also for IPAQ an Italian version of the international questionnaire was realized and evaluated the reliability [12].

About evaluation, a potential limitation of this study is the lack of the reliability of this translated version of the LII score, because this questionnaire was tested only on a small sample of Italian smokers.

Therefore, further research are necessary to evaluate the impact of the health warning of tobacco product in Italy and to compare the results with the effectiveness in different countries.

Original version Hitchman et al. [8]	Italian version	Score
1. WARNING SALIENCE: in the last month, how often, if at all, have you noticed the warning labels on cigarette packages?	1. ATTENZIONE: Nell'ultimo mese, quanto hai notato le avvertenze sui pacchetti di sigarette?	
< > very often or often	< > molto spesso	5
< > often	< > spesso	4
< > sometimes	< > qualche volta	3
< > rarely	< > raramente	2
< > never	< > mai	1
2. THOUGHTS OF HARM: to what extent, if at all, do the warning labels make you think about the health risks of smoking?	2. DANNO: Fino a che punto le avvertenze ti fanno pensare ai rischi che il fumo provoca alla tua salute?	
< > a lot	< > molto	4
< > somewhat	< > qualche volta	3
< > a little	< > poco	2
< > not at all	< > per niente	1
3. THOUGHTS OF QUITTING: to what extent, if at all, do the warning labels on cigarette packs make you more likely to quit smoking?	3. PENSIERO DI SMETTERE: Fino a che punto le avvertenze sui pacchetti di sigarette ti possono aiutare a smettere di fumare?	
< > a lot	< > molto	4
< > somewhat	< > abbastanza	3
< > a little	< > poco	2
< > not at all	< > per niente	1
4. FORGOING OF CIGARETTES: in the last month, have the warning labels stopped you from having a cigarette when you were about to smoke one?	4. RINUNCIA: Nell'ultimo mese, ti è capitato di non accendere una sigaretta perché hai visto le avvertenze sul pacchetto?	
< > many times	< > molte volte	4
< > a few times	< > qualche volta	3
< > once	< > una volta	2
< > never	< > mai	1

Table1. English and Italian version of the LII score for current smokers.

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