



EU anti-smoking graphic warnings on cigarette packets: semiotics and the issue of gender under-representation

Diane O Doherty¹ · Frank Houghton¹ · Derek McInerney¹ · Bruce Duncan² · Daisy Houghton³

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Smoking remains the leading cause of preventable mortality globally and is responsible for significant morbidity [1]. The mandatory introduction of combined anti-smoking graphic and text warnings on tobacco products within the European Union (EU) therefore has been welcomed as an important element of the necessary war on tobacco [2]. Emerging evidence suggests that such warnings are an effective tool, particularly when combined with plain packaging [3, 4].

Examination of the revised EU combined images introduced in 2014–2015 [5] reveals an under-representation of females as the focus of the warning. Where the sex of an adult smoker is indicated, male is the norm (Table 1)—(set 1, 50%; set 2, 43%; set 3, 29%).

Given the importance of the self-referential aspect of effective health promotion adverts [6], the under-representation of females in the graphic images, available from the European Commission, is particularly notable. It is important to highlight that there has been a dramatic increase in recent decades in the prevalence of smoking amongst young women [2], which is already starting to impact increasing lung cancer rates in women [7].

Smoking prevalence currently stands at 28% in the European Union amongst men and women [8]. Further,

Sweden stands out globally as a world outlier as the only country in which the percentage of female smokers (17%) outnumbers the percentage of male smokers (15%) [9]. Smoking rates amongst pregnant women in Europe vary from 10 to 27% [10]. Women smoking while pregnant is itself a very important factor in morbidity and mortality [1]. Although women live longer than men in industrialized countries, they do so in poorer health [6]. In terms of reducing morbidity and promoting equity, actions to address women's health are crucial. The under-representation of women in anti-smoking graphics appears rather bizarre given the well-known tactic of women being targeted in adverts by Big Tobacco [11]. Such attention focussed not just on women generally but often had a particular focus on women from minority groups [12].

In the context of the English language, the issue of gender invisibility or under-representation in anti-smoking tobacco packaging warnings was less of an issue when such warnings were purely text based. Despite the existence of extensive examples of sexism within the English language [13–16], the English language warnings appearing on the EU graphics are gender neutral. Some languages, Spanish, for example, assumes male as the norm, with the male version of nouns being used to refer to both male only and mixed gender groups. Female images could be used in sentences where, by linguistic norms, the masculine plural is used to name both sexes (see Fig. 1).

The EU anti-smoking graphic depicted in Fig. 1 includes the warning 'Your smoke harms your children, family and friends'. As can be seen in the combined graphic, this is written 'Su humo es malo para sus hijos, familia y amigos'. If it was written to refer to females

✉ Diane O Doherty
diane.odoherty@lit.ie

¹ Limerick Institute of Technology, Limerick, Ireland

² Gisborne, New Zealand

³ St. Anne's Community College, Killaloe, Co. Clare, Ireland

Table 1 Gender of the identified smoker in the EU combined warnings: male (M), female (F), or indeterminate (I)*

EU combined warning	Set 1 image	Set 2 image	Set 3 image
1. Smoking causes 9 out of 10 lung cancers	I	F	F
2. Smoking causes mouth and throat cancer	I	I	M
3. Smoking damages your lungs	F	M	I
4. Smoking causes heart attacks	M	M	M
5. Smoking causes strokes and disability	M	M	F
6. Smoking clogs your arteries	M	I	M
7. Smoking increases the risk of blindness	I	F	I
8. Smoking damages your teeth and gums	M	M	I
9. Smoking can kill your unborn child	I	I	I
10. Your smoke harms your children, family, and friends	M	I	F
11. Smokers' children are more likely to start smoking	I	F	I
12. Quit smoking—stay alive for those close to you	M	M	I
13. Smoking reduces fertility	I	F	I
14. Smoking increases the risk of impotence	M	M	M

*In some images, the sex of the smoker was unclear; therefore, each image was reviewed by three people and the majority opinion adopted

only, it would be written ‘Su humo es malo para sus hijas, familia y amigas’. Although this is a cultural linguistic norm and not intended as sexist language, it is perhaps problematic when it may serve to strengthen the under-representation of females present in the anti-smoking graphics and potentially normalize smoking as a male issue.

The under-representation of women in the EU combined anti-smoking graphics needs to be corrected. At present, it serves only to reinforce wider patterns of sexism and

discrimination in society. We recommend that revised anti-smoking graphics must include the perspectives of women [17, 18].

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Compliance with ethical standards

Conflict of interest The authors declare that there is no conflict of interest.

Research involving human participants and/or animals N/A.

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Fig. 1 EU-mandated Spanish anti-smoking combined graphic

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