

Parallel session 4: Cultural identity implications in genomics research and communication

**SPANISH NEWSPAPER COVERAGE OF THE TOPIC “GENETICS”:
A SEVEN-YEAR LONGITUDINAL STUDY**

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Abstract

This study is aimed at analysing the daily press coverage of one medical topic among health and medical news: Genetics, perhaps one of the most exciting issues of health and medical subjects that promotes debate and touches ethical and political aspects. With this objective, a seven-year longitudinal monitoring of the press content of genetics (1997 to 2003) in five Spanish newspapers with the largest circulation was carried out using the Quiral database. According to the data provided by the Oficina de Justificación de la Difusión (OJD), these five Spanish newspapers are El País, ABC, El Mundo, La Vanguardia and El Periódico de Catalunya.

Methodology

The Quiral database gathers all the information concerning medical and health issues. After analysing all the news quantitatively and qualitatively an annual report is written: the Quiral report. This study was possible thanks to the support of the non-profit-making organization Fundación Vila Casas, and forms part of a larger project called *Proyecto Quiral* set up in 1996 at the Scientific Communication Observatory at the Pompeu Fabra University (UPF) in Barcelona.

Key Words: genetic news, Spanish newspapers, follow-up.

Since 1997, 12705 newspapers (1815 each year) have been revised and all the information regarding medical and health issues has been gathered in the Quiral database which gives the opportunity to study daily press coverage in the 5 Spanish newspapers revealing topic news that have an acute pattern of information or the ones that are covered during the whole year (chronic pattern). The news with an acute pattern and the ones with a chronic pattern have different characteristics:

Acute pattern: this kind of news attracts a lot of interest but only during a short period of time. They disappear suddenly but sometimes they can get a chronic pattern, and their presence in the frontpage of the newspapers is higher than for other news. They produce more letters to the editor and opinion articles and they share very often the same title in different newspapers. These news

are prone to produce more sensationalism and are more dependent on news agencies.

Chronic pattern: the news with a chronic pattern have an interest during the whole year but can get an acute pattern sometimes. Examples of this kind of news are the ones concerning cancer, AIDS, tobacco... Their presence in the front page of the newspapers is not more frequent than for other news and they don't produce opinion articles above the median. In general, the journalists that write these news that belong to this pattern use more information sources.

Table1 shows the total number of health news, number of news about genetics and the distribution of news by newspapers.

The topic genetics covers different issues like cloning, human genome, stem cells, molecular biology, biotechnology, transgenics and genetic manipulation, gene therapy, embryology and bioethics.

As shown in the table, from 1999 to 2003 there is a median of 1000 news each month.

The newspaper ABC was found to be the most productive with a total of health news of 17556 with respect to La Vanguardia with 11733 news since 1997. This finding can be attributed to the design of the newspaper and the importance given to one information or another. The ABC newspaper publishes a lot of brief news and short news while La Vanguardia and El Periódico publish longer news. This fact is translated in a decrease in the number of news.

The news of the year were:

1997: Cloning ("Dolly" the sheep), "Medicamentazo", Meningitis

1998: Medical assistance, Viagra, "Medicamentazo", Cloning of human beings, Eutanasia.

1999: Dioxines and Coca-Cola (food contamination), Corporative issues about doctors.

2000: epidemic of *Legionella*, Human Genome (draft of the sequence), Mad Cows, Waiting lists.

2001: Mad cows, Cloning of a human embryo, Human genome (complete sequence), biological weapons (Anthrax).

2002: AIDS (International Conference in Barcelona), sexuality and reproductive issues, ecstasy.

2003: SARS epidemic, sexuality and reproductive issues (abortion, assisted reproduction law...).

The majority of the news about genetics was published in the "Society" section of the newspapers and sometimes in specific Science supplements and

the source of information used by the journalists is very often a person with expertise in the genetics field. The ethical aspects of cloning, gene therapy, embryo research, genetic manipulation/transgenics and human genome produced letters to the editor, opinion articles and editorials.

In a two-year follow-up of the topic Cloning we have shown that at the beginning and just after the announcement of “Dolly” the news covering Cloning were informative but changed to the ethical aspects turning to opinion news.

D. de Semir, T. Adrover (1999). "Cloning seen by spanish newspapers. Use of Quiral databse for case studies". Libro II (p.678) de Comunicaciones y Pósters del *I Congreso sobre Comunicación Social de la Ciencia (Granada)*.

A qualitative study (not shown) of the total amount of news and the news concerning genetics has revealed that the Quantity of news is not always linked to a Quality of them. Instead of publishing more news it would be better to publish less news but with more quality.

Figures and tables

Table 1. The percentages of news about genetics with respect to the total of news are shown in brackets.

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Year	1997	1998	1999	2000	2001	2002	2003	Total
N°of news	5984	8706	11135	11945	11200	15037	12882	
N°of news about genetics	263 (4.4%)	526 (6%)	527 (4.7%)	743 (6.2%)	750 (6.7%)	700 (4.6%)	1023 (8%)	
ABC	1484	2360	2014	2314	2409	3824	3151	17556
El País	1194	1780	1900	1917	2458	3445	2573	15267
El Mundo	1386	1983	1930	1964	2289	2813	2889	15254
El Periódico	962	1298	1389	1886	2066	2703	1974	12278
La Vanguardia	958	1285	1502	1464	1977	2252	2295	11733