

# Prevention of Sexual Transmitted Diseases in Biology textbooks from different countries

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## Abstract

We present a comparative analysis in textbooks of different 17 countries on the topic “Human Reproduction and Sex Education” by using a specific constructed grid of analysis. The focus is on two sub-topics associated to pupils’ development of responsible behaviour: the control of reproduction and the Sexually Transmitted Diseases (STDs).. Results showed important differences from one country to an other, even if AIDS is presented in all textbooks analysed. Some countries textbooks, but not all, give also information about other STDs. Special attention was given to condom images and how textbooks refer to the way of using it.

## 1. Background, aims and framework

In the scope of the European project Biohead-Citizen “Biology, Health and Environmental Education for better Citizenship” (FP6), coordinated by Carvalho G., Clément P. & Bogner F. (2004-2007) we are working on a comparative analysis of textbooks contents from 19 countries. A specific goal of this project was to clarify and to improve understanding of how different aspects of citizenship, including emotional and social dimensions, are promoted or could be promoted through Biology, Health and Environmental Education (Carvalho & al., 2005), and to analyse, in the science textbooks, how the scientific knowledge is interacting with values and social practices (Clément 2006). The specific focus of the present work is on “Human Reproduction and Sex Education” (HRSE). This topic concerns the daily life particularly of young people. Its biological aspects overlap with emotional and moral issues, which interact with the specific pattern of values and social practices of the involved countries.

Are Biology textbooks contributing to pupils’ responsibility as regards of sexuality? Do they help children or young people to gradually appropriate the means to operate choices, to adopt responsible behaviour for themselves as well as for the respect of others?

Textbooks, as well as syllabuses, represent a precise level within the didactic transposition model. It is the result of several strategies: (a) strategies leading to the drafting of official syllabuses and programmes involving influences of different actors: the Ministry of Education, the main educational system policy makers, families, associations, unions or political groups, as well as the personal views of each syllabus committee member; (b) textbooks publishers strategies (marketing); (c) authors’ strategies for textbooks (supposed to represent teachers’ and students’ needs); (d) as well as strategies of images diffusers (images data bases), etc.

In the present work we analysed current school textbooks of 17 countries with regard to interactions between contents and some contrasted socio-cultural contexts. This work focused on two important sub-topics that are associated to pupils’ development of responsible behaviour: the control of reproduction and the Sexually Transmitted Diseases (STDs).

## 2. Methods and samples

An essential point of our methodology was to construct a grid to analyse textbook contents in all concerned countries. It was developed within the Biohead-Citizen project during the year 2004-2005 and then tested preliminarily in few textbooks of most countries. The grid was then improved and the final grid was applied in all countries participating in the project: for each textbook an entire grid was filled in. In the present work we only used the part of the grid, concerning the male and female condoms and the STDs (Figure 1); the presence or absence of each indicator in both text and images of textbooks were recorded in the grid.

CONCEPTIONS	INDICATORS	IMAGES N°occurrences		TEXT Yes/No	ANNEX
MALE CONTRACEPTION	Male Condom				
	<b>Man Condom image type:</b>	<b>Photo</b>	<b>Schema/Drawing</b>		
	- Rolled condom - Unrolled condom - Penis in erection with condom - Penis with condom penetrating vagina - Condom on a penis-shaped object - Others (specify in annex)				
Woman Condom					
FEMALE CONTRACEPTION	<b>Woman Condom image type:</b>	<b>Photo</b>	<b>Schema/Drawing</b>		
	- Rolled condom - Unrolled condom - Condom inside the vagina - Others (specify in annex)				
	Sexually Transmitted Diseases (STDs)				
SEXUALLY TRANSMITTED DISEASES (STDs)	Sexually Transmitted Infections (STIs)				
	- AIDS - HIV				
	<b>Other STDs:</b>				
	- Chlamydia - Genital Herpes (HSV) - Genital Warts (HPV) - Syphilis - Gonorrhea - Chancroid - Viral Hepatitis - Vaginitis - Others (specify which STD in annex)				
	Risk				
	Risk behaviours				
	Sexual behaviours				
	Sexual attitudes				
	Prevention of STDs				
	Others (specify in annex)				

**Figure 1** - Grid for the identification of male and female condoms and the STDs and their occurrences in the chapters related to human reproduction and sex education

In this work 47 textbooks of 17 different countries were analysed. We selected two sub-topics – the control of reproduction and the STDs – in view of their relevance in the development of pupils' responsible behaviour. It has been assumed that injunctive discourse with moralizing content tends to block children in the inhibition and/or the rejection of messages (Picod & Guigné, 2005). This is why we wanted to know how authors of textbooks present these two sub-topics: What are the STDs presented in textbooks? Can we find injunctive talks concerning prevention of STDs? What types of contraception methods are presented to protect against STDs: male and female condoms? Are they presented with their advantages as well as with their disadvantages (in term of safety)? Finally, can we correlate the differences in the contents and forms with the sociocultural differences from one country to another one ?

### 3. Results and discussion

AIDS is presented in each textbook analysed, some countries gave more information concerning the different kind of STDs (France, Senegal, Finland) than others (Portugal, Germany, Tunisia). The number of occurrences devoted to images of STDs in textbooks are focused mainly on AIDS (with many images presenting HIV) but Syphilis and Gonorrhoea are often present in some countries textbooks only.

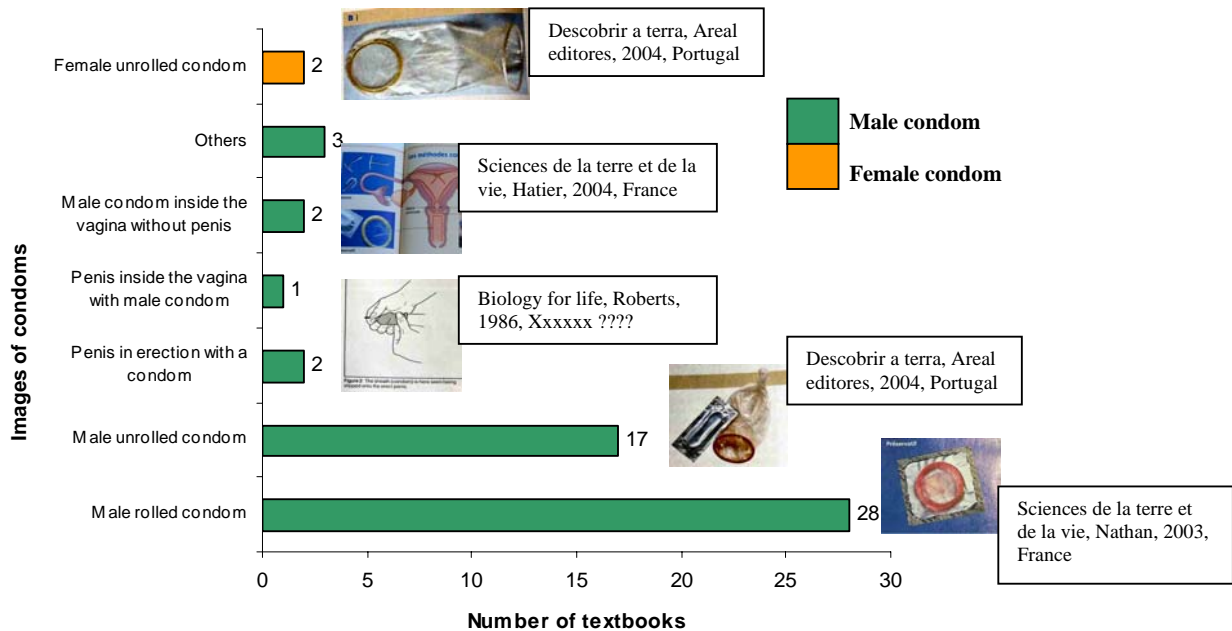
Depending on the countries, STDs are treated in the part of textbook devoted either to Human Procreation (in the chapters about the control of the reproduction, the hygiene of reproduction or directly in chapters devoted to STDs and AIDS) to Immunology (with AIDS in particular) and Body Protection. In this latter case textbooks often give only scientific knowledge anchored in the biomedical model with no or little connection with health promotion.

For the prevention of STDs, some textbooks (e.g. in Senegal and Morocco) use injunctive or persuasive educational style: for instance a Moroccan textbook (Natural sciences, Ifriquia Charq, 1996, pp.160) says: '*Avoid illegal sexual intercourse, use the condom, take medical controls*'.

In contrast, the participative educational style is absent; it might be more efficient for developing students' competencies towards health risk behaviours.

When condoms are mentioned in textbooks as means of contraception, we analysed both their images (male or female condom) and how textbooks refer to the way of using condoms: rolled or unrolled condoms? Man's condom unrolled in erected penis? Woman's condom inside the vagina? (Figure 2).

Condoms are the only contraceptive method proven to reduce the risk of all STDs including HIV. They can be used as a dual-purpose method, both for prevention of pregnancy and protection against STDs. Of the 47 analysed textbooks, only 26 presented condom for both prevention of pregnancy and protection against STDs. Usually condoms are only presented for the prevention of pregnancy, as a mechanical (barrier) contraceptive method. Only 5 textbooks referred to woman's condom in text, and 2 textbooks in images. Only in an Estonian textbook we could find a description of the mechanism of using the condom, its advantages in STDs protection as well as how to get it. Moreover several textbooks (Lebanon, Senegal) make confusion between diaphragm and women condom. For instance a Senegal textbook (Géologie- Biologie, Nathan, 1996, pp.168) says: '*The female condom or diaphragm*' and a Lebanon one (Life sciences, Le Pointier, 1999, pp.25) says: '*Use of male condom: the male condom is considered as the best way to protect against STDs... The diaphragm is considered the female equivalent of male condom.*'



**Figure 2** – Textbook images of several countries showing different forms to present condoms.

#### 4. Conclusion and implication

Results show that textbooks give major importance to AIDS as compared to other STDs, even if in some countries AIDS is not the most common STDs. Moreover results show the predominance of the male condom as regard to female one. We observed differences not only between countries but also between publishers of the same country. We will present and discuss these results with more details in the communication.

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