

Health education in textbooks of 16 countries: Emphasis on biomedical and health promotion approaches

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Abstract

Classically, Health Education has been based on the Biomedical Model (BM) of health, where the pathologic, curative and preventive conceptions are the main pillars. The more recent approach of Health Promotion (HP) looks for identification of healthy habits and for developing personal empowerment for healthy decision-making towards environmental challenges.

The aim of the present study was to compare the emphases on either model (BM or HP) given by textbooks on the topic of Health Education of 16 countries. A total of 71 primary and secondary textbooks on the topic health education were analysed. A specific constructed grid was used for the textbook analysis. Text and image analysis of all countries textbooks allocated France, Malta and Italy to the BM pole whereas other countries such as Germany, Mozambique and Finland were preferentially linked to a HP approach.

1. Background, aims and framework

Classically, Health Education has been based in the Biomedical model (BM) of Health. The pathologic (Pa), Curative (Cu) and Preventive (Pr) conceptions are the main pillars of the BM, therefore Health Education has been based in the information about the diseases, how to cure them and especially how to prevent them, by means of persuasion by educators and/or by health professionals (Leininger, 1984). The idea is to make children and young people to get informed about diseases – which are often shown in horrifying images – and persuade them to avoid or change unhealthy habits to prevent such diseases. Bury (1988: 106) expresses clearly this perspective: “*Health Education motivates persons to obtain information and to do something to be in good health by avoiding the harmful actions and by creating favourable habits*”.

In the decade of the 80s of the 20th century the notion of Health Promotion (HP) emerges with a holistic perspective of health where the person is seen as a bio-psycho-social unit in permanent interaction within him/herself and his/her environment, including the other human beings. The HP approach does not dispense the medical practice but considers that the BM is only a little part of a much larger whole where upstream causes (socio-economic, housing, nutrition) are determinant to set off persons’ illness. The dynamic relationship of the person with the environment plays a major role in the HP approach where the person needs to create his/her own resources and acquire competencies to fight constantly against disturbing environmental agents (Antonovsky, 1987; 1993)*. In this view of Health Promotion, Health Education is seen as a life-long process, since birth until death, that helps persons to make informed choices towards healthy habits (Jones & Naidoo, 1997; Katz & Peberdy, 1998; Ewles & Simnett, 1999). In this context HP looks for: identification of Healthy (He) habits, develop personal and social empowerment (Ep) for healthy decision-making towards environmental (Ev) challenges.

* In Katz & Peberdy (1998)

The aim of the present study was to compare the emphases on either model (Biomedical model or Health Promotion) given by primary and secondary textbooks on the topic of Health Education in 14 countries.

2. Methods

The corpus of this study was composed of a total of 71 textbooks of primary and secondary school on the topic Health Education analysed in 16 countries: 7 of Portugal, 6 of France, 5 of Germany, 11 of Italy, 2 of Malta, 5 of Hungary, 1 of Poland, 1 of Romania, 1 of Finland, 2 of Estonia, 2 of Lithuania, 3 of Cyprus, 14 of Lebanon, 7 of Morocco, 2 of Mozambique and 2 of Senegal.

For the textbook analysis it was used a grid constructed by the European FP6 STREP project Biohead-Citizen (CIT2-CT-2004-506015). For the grid construction two meetings of the Biohead-Citizen project were held: the first in Algeria (6-10/05/05) and the second one in Malta (21-25/05/05). The differentiation between two approaches on Health Education – Biomedical model and Health Promotion – was clarified in the first meeting (with the Francophone teams) and a first draft of the grid was prepared. In the second meeting (with the Anglophone teams) this grid was improved. A preliminary test of the grids in a few textbooks was carried out by all teams during the last 4 months of 2005 and the improved/corrected definitive grids were applied between March and September of 2006.

The grid question used in the present work was as follows:

HE-1.2. Text, titles and sub-titles: Biomedical (BM) vs Health Promotion (HP)

Using the precedent table, for each sentence, classify it as:

Pa – Pathologic; **Cu** – Curative; **Pr** – Preventive;

He – Healthy; **Ep** – Empowerment; **Ev** – Environmental.

Explicit messages – when some key-words are present: disease names, infections, etc. (Biomedical conception) vs healthy choices, lifestyles, empowerment, etc. (Health Promotion conception).

The results can be summarised in the following table:

		Biomedical (BM) conception				Health Promotion (HP) conception			
		Pa n (%)	Cu n (%)	Pr n (%)	Total BM (Pa+Cu+Pr) N (%)	He n (%)	Ep n (%)	Ev n (%)	Total HP (He+Ep+Ev) N (%)
Total analysed phrases									
Number and % of phrases	N (100%)								

A similar question was asked for images.

3. Results, conclusions and implications

The results herein presented show that French textbooks were especially rich in sentences within the BM approach: 99.2% (Fig.1-A). This is an example taken from “Sciences de la Vie et de la Terre”; R. Tavernier/ C. Lizeaux; Publisher : Bordas-France, 1997; Level of study: 5ème; 12/13 year-old pupils:

Pathological: *“Fractures result from shocks or violent movements that break a bone”*. (p.22).

Curative: *“The doctor has to put back together the pieces of bones and the joint must be kept still to allow the cicatrizing”*. (p.22).

Preventive: *“French doctors are concerned about the increase of the number of too big children who will be later at risk of becoming obese”*. (p.70).

In contrast, Germany textbooks were the most rich ones within the HP approach: 64.6% (Fig.1-A). This is an example taken from “Ikarus”; Eckerskorn et al.; Publisher: F.X. Stratil; Level of study: grade 5; 10/11 years-old pupils:

Healthy: *“Children who are still growing need more proteins as adults”*. (p.57).

Empowerment: *“Be powerful against drugs: Resist seduction and peer pressure from others, defend your self-recognised values and distance yourself from morbid fashions.”* (p.83).

Environmental: *“Correct eating means: don’t ingest more energy than needed.”* (p.57).

From the analysis of the sentences of all textbooks in each country it was possible to find out that the countries with higher percentage of the traditional Biomedical model approach to Health Education were France (99.2%), Malta (98.5%) and Italy (91.0%) whereas the countries showing more tendency for the Health Promotion approach were Germany (64.6%), Morocco (51.0%) and Finland (50.1%) (Fig.1-A).

When looking at images (Fig1-B), Malta (99.5%), France (92.2%) and Italy (82.1%) are on the top of BM occurrences, together with Estonia (85.7%). Again Germany is the country with higher proportion of HP image occurrences (74.2%), followed by Hungary (65.1%) and Finland (62.0%). The variation found in images (Fig.1-B) as compared to the corresponding country text occurrences (Fig.1-A) has to do with the much lower number of images when compared to text occurrences.

These are global results concerning all the textbooks per country. However we have also done a comparative analysis by 4 separate groups of pupils’ age: 6 to 9, 10-12, 13-15, and 16-18 years. These data will be presented in detail and fully discussed at the meeting.

These results show that in diverse countries Health Education is currently taught with different emphasis as far as the Biomedical model and Health Promotion approaches are concerned. The association of these data with other parameters obtained not only from the same grid of analysis (Health Education) but also other grids that have also been applied (Human Brain, Human Genetics, Human Origin, Human Reproduction and Sex Education, and Ecology and Environmental Education) in the same countries can give further insight to the results herein presented.

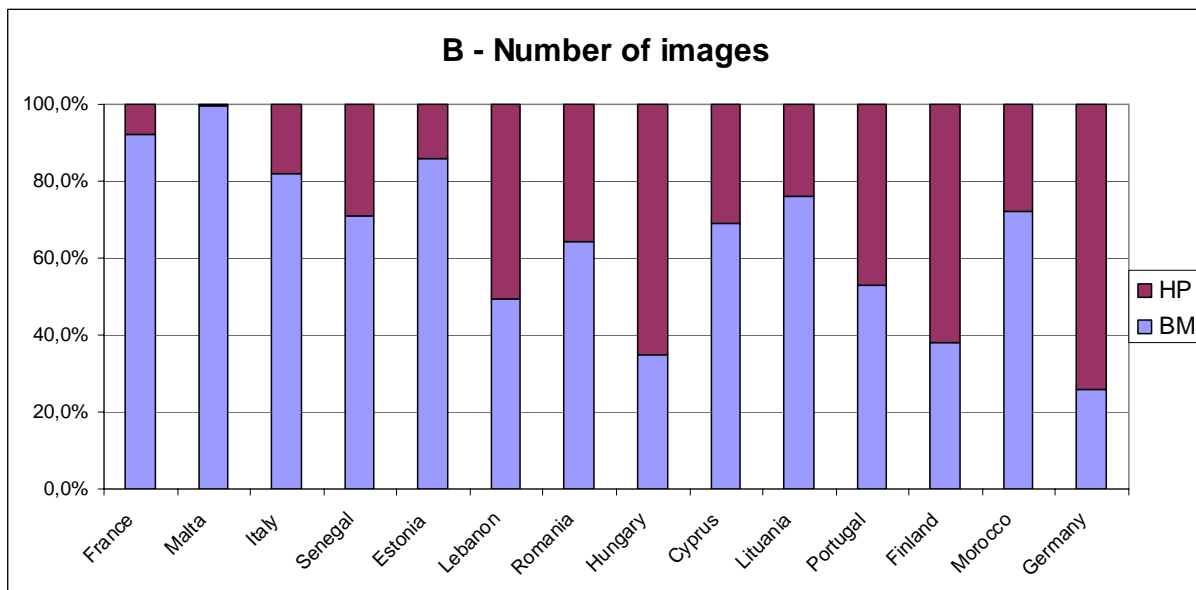
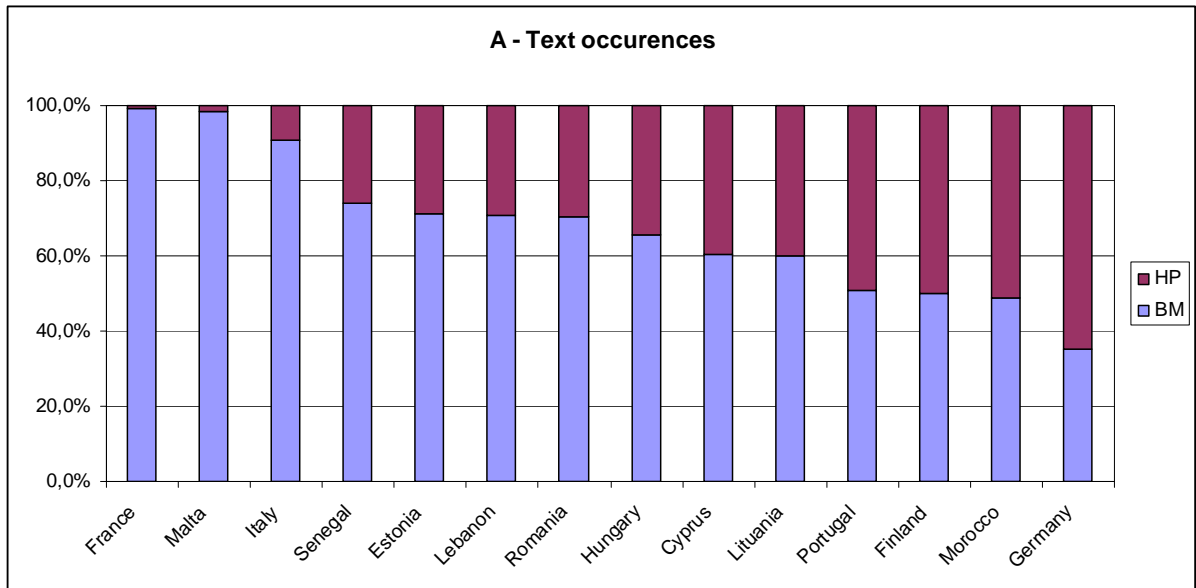


Fig.1 – Proportion of Biomedical model (BM) and Health Promotion (HP) occurrences in text (A) and in images (B) of textbooks of different countries.

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Bibliography

Bury, J.A. (1988) *Education pour la Santé*. Bruxelles : De Boeck-Wesmael.

Ewles, L. & Simnett, I. (1999). *Promoting health - A practical guide*. London: Baillière Tindall.

Jones, L. & Naidoo, J. (1997). Theories and models in health promotion. In J. Katz & A. Peberdy (Eds.), *Promoting health - knowledge and practice* (pp. 75-88). London: Macmillan Press.

Leininger, M. (1984). *Care: the essence of nursing and health*. New York: Charles B. Slack.

Katz, J. e Peberdy, A. (1998) *Promoting Health: Knowledge and Practice*. London: MacMillan.