



Study on the Cancer's Representations from Non-Initiated Academic Pupils and Their Filing Systems

Sebastien Malpel¹, Emmanuella Di Scala-Fouchereau², Philippe Ricaud³,
Robert Andres⁴, Nathalie Pinsard⁵

^{1, 2, 3} Laboratory CIMEOS EA 4177 University of Burgundy (France)

^{2, 4, 5} ESPE of Burgundy (France)

¹Sebastien.malpel@u-bourgogne.fr, ²emmanuella.di-scala@u-bourgogne.fr, ³Philippe.Ricaud@u-bourgogne.fr, ⁴nathalie.pinsard@u-bourgogne.fr, ⁵robert.andres@ac-dijon.fr

Abstract

Representation is an act of thought through which a subject relates to an object. There is no representation without an object [1, 2]. In order to comprehend the representation's content [2, 3, 5], it is thus necessary to emphasize on the components from the representations which scientific information belongs to and that is of great interest for this study on cancer.

This study aims to identify the cancer's representations that pupils from different levels have. Two variables are taken into account: the pupils' level (4^{ème} (Year 9), 1^{ère} S (Year 12 specialised in Science), Master's degree) and the relative position of cancer compared with other illnesses.

The sample is composed of 217 informants: 96 pupils in Year 9, 83 pupils in Year 12 – Specialisation in Science and 38 students in a biology master's degree (1st and 2nd year). The information were gathered from the filing systems intuitively established by the pupils/students (filing systems from non-initiated). The first questionnaire (pre-study) required to list the names of the illnesses that come straight to their minds. The second suggested 4 features (contagious illnesses, mortal or curable with or without medicines) and asked to classify illnesses according to the latter.

The results showed that the pupils who should have been less concerned about cancer were actually the ones who thought first to cancer. Cancer is the illness the most quoted before influenza and HIV (especially in Year 9). Cancer is perceived as non-contagious (95%) but highly associated to death even though the chances of survival thanks to a treatment are higher than for the other illnesses evoked (HIV, influenza, Ebola). The representations of cancer are modified according to the age and thus the level of study: the older you get, the less important the illness is. It is possible that once other illnesses are known, the cancer looks less threatening.

These results gave rise to the importance of teaching and giving detailed information to young people during their education (whether at school or not). It is hoped that such an education would demystify the cancer

1. Introduction

The representative phenomena's communication is the vector of the language transmission, the latter being the representations' carrier [2]. Furthermore, social communication – in its inter individual, institutional and mediatised aspects – appears as a condition to the possibility and determination of the representations and the social thought [1]. Representation is an act of thought through which a subject relates to an object. There is no representation without an object [2]. In order to comprehend the representation's content, two orientations emerge: First, the representations are a structured field and second, they are a structuring core [2].

This means that, at first, it is needed to emphasize on the components from the representations which scientific information belongs to and that is of great interest for this study on cancer. Secondly, it is necessary to apprehend the elementary structures around which the representations systems crystallise. In order to do so, the process supervising the genesis of the latter will be related to. This study will be tackled later on.

The cancer's representations have been widely studied by psychologists and health anthropologists [4, 5]. However, the school population had never been specifically targeted. This study thus aims to partially rectify this lack of information thanks to the representations that different school populations have on cancer.

This paper led us to study secondary-school pupils, high school students and college students. One may wonder what the representations of these different students on cancer are and if these representations are dependent on the age of the student.



2. Methodology

2.1 Surveyed sample:

The sample for our study is composed of 217 informants: 96 pupils in Year 9 (13 years old), 83 pupils in Year 12 – Specialisation in Science (16 years old) and 38 students in a biology master's degree (1st and 2nd year – 22 years old). Two variables are taken into account: the pupils' level (Year 9, Year 12 and Master) and the relative position of cancer compared with other illnesses.

The first questionnaire (pre-study) required to list the names of the illnesses that came straight to their minds. The second questionnaire is composed of four questions: 1) Can you list the illnesses you know that are contagious?, 2) Can you list the illnesses you can die from?, 3) Are there illnesses you can recover from without any medicines? Which are they?, 4) What are the illnesses you absolutely need to take medicines in order to heal?

The information were gathered from the filing systems intuitively established by the pupils/students (filing systems from non-initiated). This method has two positive sides: 1° No direct questions which means the student doesn't have possible answers to check and 2° this allows to situate cancer among other common illnesses. This kind of questionnaire grants something that semi-guiding interviews don't: a spontaneously quoted list of illnesses, a rank of the most quoted illnesses and a non-initiated ranking of illnesses, including cancer.

2.2 Data processing:

The results are gathered in histograms. The percentage of all the answers given from the informants is shown in ordinate. The level of studies (Year 9, Year 12 or Master) is given in abscissa. The data always inform on the four most quoted illnesses which are the cancer, AIDS, Ebola and the flu.

The results from questions 2 and 3 of the questionnaire are not represented in this study.

3. Results and discussion

3.1 Is cancer an illness that come straight to the pupils' mind?

The illnesses that come straight to the pupils' mind are, in order, cancer, AIDS, Ebola and the flu. Other illnesses have been cited but less than these four ones.

Year 9 pupils spontaneously quoted cancer (90%) and it is also the illness that is the most cited in first place (35%). Then, in a decreasing order, other serious illnesses, even deadly, are quoted such as AIDS (69%) and Ebola (65%).

In year 12 (Specialisation in science), cancer comes second in the top rank (54%) just behind the flu (59%).

However, in Master, cancer is less evocated as it is only ranked in fourth position amongst the most cited illnesses (behind the flu, AIDS and cystic fibrosis). On top of that, cancer is only quoted in first position for only 10% of the students.

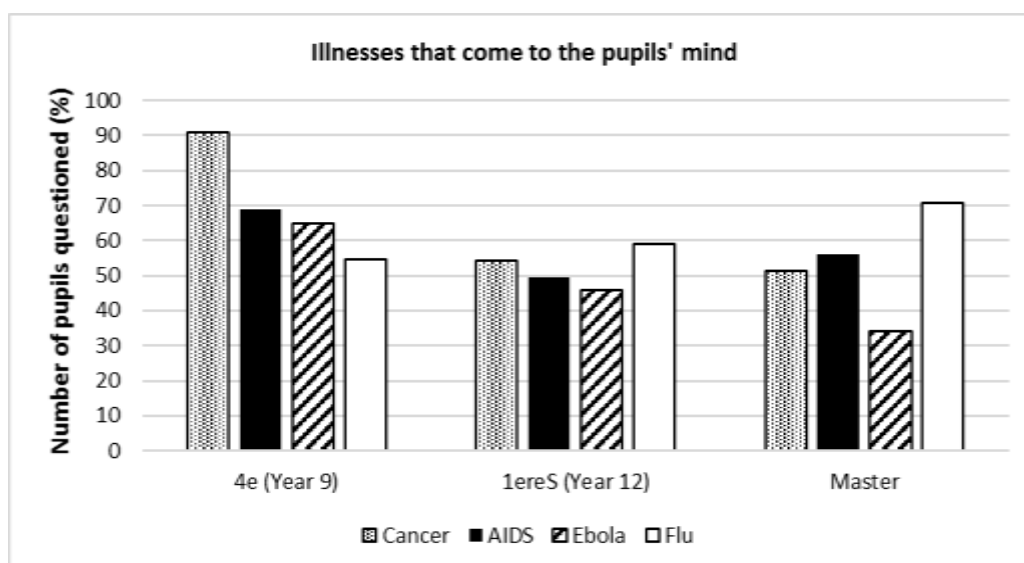




Chart 1: Percentage of the pupils questioned about the illnesses that came straight to their mind depending on their level of studies: Year 9 (n=96), Year 12 (n=83) and Master (n=38).

It thus appears that the cancer's importance compared with other illnesses varies according to the age and the level of education. Younger pupils (in this study, year 9) tend to be more affected by cancer.

3.2 What are the illnesses you can die from according to the pupils?

Once again in Year 9, cancer gets the 1st place (90%) of the illnesses you can die from. While in Year 12, the percentage of pupils who quoted cancer as an illness which come to their mind is lowered to 54%, almost 100% quoted cancer as an illness from which you're likely to die (81 out of 82 pupils thought so).

Among Master's students, cancer seems to be perceived as a serious illness from which you can possibly die only by 42% of students. This percentage is much lower than the other levels' percentages. Yet, its percentage is almost the same as the flu (45%).

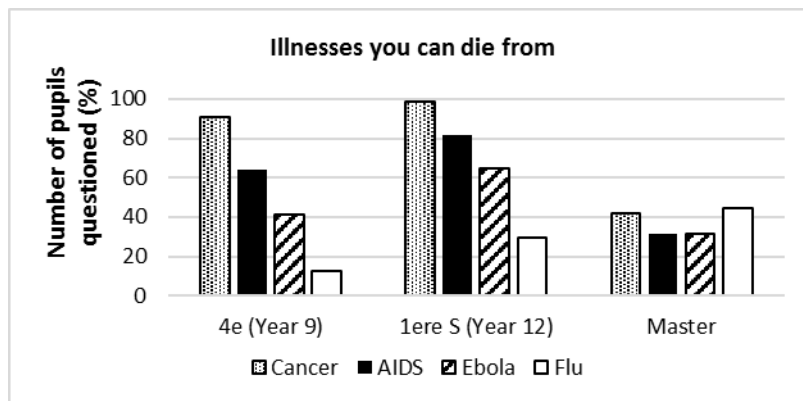


Chart 2: Percentage of the pupils questioned about the illnesses you can die from depending on their level of studies: Year 9 (n=96), Year 12 (n=83) and Master (n=38).

For secondary-school pupils, cancer is still really present in their minds and is the illness the most associated with death. Furthermore, even though Year 12 pupils do not necessarily think of cancer (cf. Chart 1), it is still closely associated with death as well. Among Master's students, the forecast is less pessimistic. Of course, they do not ignore the fact that one can die from cancer but they also know that one can recover from it and they emphasize on illnesses often considered as more benign such as the flu.

3.3 According to the pupils, what are the illnesses you can recover from thanks to medicines?

The unavoidable use of medicines is another indicator of the morbidity of cancer such as seen among the school population. Once again, cancer is the illness the most cited among Year 9 pupils (21.6%).

Pupils from Year 12 quoted it even more with 30%. AIDS is placed in 2nd position among Year 9 and in 3rd position among Year 12 (right behind Ebola).

Master's students placed this time cancer on the 1st position of illnesses you can't recover from without medicines (26%): Even though they quoted cancer less often than Year 9 and Year 12, they acknowledge the fact that cancer is a serious illness and needs to be healed through medicines. However, AIDS is not mentioned anymore (0 out of 38 students) while Ebola comes in second position.

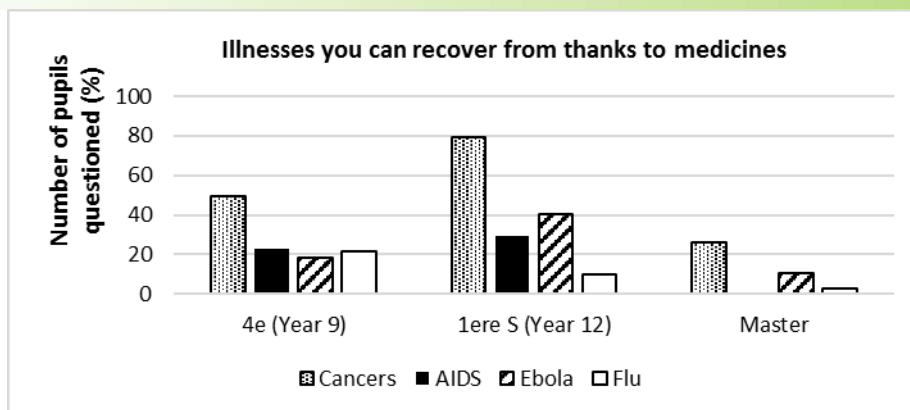


Figure 3: Percentage of the pupils questioned about the illnesses you can recover from only with medicines depending on their level of studies: Year 9 (n=96), Year 12 (n=83) and Master (n=38).

Cancer is thus the illness the most cited by the students, no matter their scientific level. Once again, the same illnesses are the most quoted, which show that they are probably most likely to make an impression on pupils. The significant exception of AIDS is noticeable as it was one of the most cited illnesses from Year 9 and 12 pupils but is not quoted anymore by Master's students.

4. Conclusion

Cancer is mainly perceived as a dangerous illness, no matter the age or the level of studies. In that, they all possess the same sensibility [6]. However, our study showed that the relation to cancer varies according to one's age and level of studies: Young pupils tend to associate more cancer to death while Master's students think of cancer as a serious illness among others and their answers prove they have a wider knowledge and sensibility to other illnesses. It is important to note that it is also somehow the case for AIDS.

Two non-exclusive hypothesis may be considered in order to explain this difference between Year 9 and older students such as Year 12 and Master's students:

1 – As the age and the level of studies increase, the students have a richer and wider knowledge of other illnesses which could explain that they pay less attention to a specific illness such as cancer. This hypothesis is strengthened by the total number of illnesses quoted by the different students: 54 in Year 9, 61 in Year 12 and 114 in Master.

2 – Cancer, seen as a serious, often fatal and common illness that the pupils know since they're infants, is an illness that is most likely to strike young minds. One can imagine that once the children grow up, they become teenagers and young adults who learnt how to put things into perspectives and do not perceive cancer the same way young children would, as if they could adapt themselves to the idea of death, ineluctable anyway.

This work has been supported by BQR ESPE, Labex Lipstic and CIMEOS.

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