1-1-2012

Understanding communication of health information: a lesson in health literacy for junior medical and physiotherapy students

Frank Doyle
Royal College of Surgeons in Ireland, fdoyle4@rcsi.ie

Sally Doherty
Royal College of Surgeons in Ireland

Karen Morgan
Royal College of Surgeons in Ireland, kmorgan@rcsi.ie

Orla McBride
Royal College of Surgeons in Ireland, orlamcbride@rcsi.ie

Anne Hickey
Royal College of Surgeons in Ireland

Citation
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Understanding communication of health information: a lesson in health literacy for junior medical and physiotherapy students

Doyle F, Doherty S, Morgan K, McBride O, Hickey A
Division of Population Health Sciences (Psychology),
Royal College of Surgeons in Ireland, Dublin 2, Ireland
tdoyle4@rcsi.ie

Introduction
Communicating health information is a core skill required of all health care professionals. However, the ability of the recipient to understand the information provided – health literacy – is critical (Baker, 2006), yet receives relatively less attention in health professional teaching and training. The most commonly used method of communicating health information to patients and the general public is through use of patient information leaflets (PILs) (Pander Maat and Lentz, 2010). It is vital that these are designed in an optimal manner, taking at least three key principles into account:

1. They should have a low reading age, ensuring that the average reader can read and comprehend PIL content (Williamson and Martin, 2010).
2. PILs should utilise theories of health behaviour to maximise their motivational effects and provide practical assistance to the reader to adhere to the PIL’s recommendations (e.g. Armitage and Conner, 2000).
3. They should be accurate, contain enough detail, and not be biased by companies who sponsor the information (Charnock et al., 1999).

Aim
As students of the healthcare professions will become future users of PILs in patient interactions, they need to understand and apply these principles to PILs. We describe a student project that requires engagement with indices of readability, theory content and quality ratings of PILs on smoking.

Method
Participants: Of the class total of 357 medicine and physiotherapy students, 337 provided full informed consent (94%). Mean age was 20.2 (SD 1.8), 50% were women, and 92% were studying medicine, 8% were current smokers with 3% ex-smokers.
PILs: Ten PILs on smoking were used – 2 each from Canada, Ireland, Malaysia, UK and USA. However, only 5 students chose to answer questions on the second USA PIL, so this was excluded from subsequent analyses. PILs were chosen if they: focussed on smoking, were written in English, were no more than 2-4 pages long (or not more than 1500 words), were available online with an available live url link.

Procedure: RCSI Research Ethics Committee provided approval for the study protocol, and participants provided informed consent. Students were informed that they required as part of coursework to appraise a PIL for readability (Flesch, 1948), psychological theory content and overall quality rating (DISCERN, Charnock et al., 1999), and to then try modify/improve the PIL to incorporate information based on psychological theory. They then chose one of the provided PILs for appraisal and subsequent modification, with a re-assessment of readability, in order to determine whether their own theory-driven modifications had a positive or detrimental impact on Flesch score. They completed these questions on the RCSI virtual learning environment (Moodle), and submitted an 850-word appraisal of the PIL for summative assessment.

Results
Mean Flesch scores ranged from 52.8–79.7% (standard to fairly easy readability), but importantly there was no significant change post-modification (t=1.66, p=0.097; see Fig 1).

Overall DISCERN ratings were variable, with quality ratings consistently lower than overall or reliability ratings – see Fig 3 – possibly because areas of treatment uncertainty and information sources were not highlighted in PILs.

Conclusions
This student project acts as a learning opportunity to increase awareness of health literacy in junior medical and physiotherapy students. The project increased awareness of:
- the importance of health information readability
- practical use of health psychology theory
- quality rating of information provided to patients.

Such understanding should serve to improve interactions between these future healthcare providers and health service users.

References

Fig 1: Mean Flesch scores pre- and post-modification

The proportions of students who identified various theories is shown in Fig 2. Unsurprisingly, identified theories were mainly those which had been taught didactically.

Fig 2: Student identified theory in each PIL

Fig 3: Mean DISCERN ratings, ordered by overall rating