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Abstract

Diagnosis strategy is difficult to teach to young students with limited clinical experience. We presented a possible way to use a student' leisure activity, *House (MD)*, as a teaching tool.

Key words= diagnosis, likelihood ratio, medical education

One of the most difficult courses for medical students is teaching of diagnostic strategy. The Bayesian approach to pre- and post-test probabilities, likelihood ratios and the other diagnostic test validity parameters are difficult to understand for young students with limited clinical experience. However, these concepts are essential for a rational approach to clinical examination and complementary investigations. The teaching approach based on clinical cases and examples helps to facilitate understanding of these concepts, but we have also tested another method.

In each episode of the Fox television series, Gregory House, the so-called Sherlock Holmes of physicians, repeats his catch phrase "Everybody lies" (1). Without actually seeing his patients and basing his approach exclusively on the patient's symptoms and the results of new and aggressive complementary investigations, Dr House and his team consider exceptional diagnoses and then try various treatments which generally lead to deterioration of the patient's condition. At the end of the episode, Dr House finally proposes the right diagnosis (the least probable) and treats the patient. It is obviously only a television show, but its worldwide diffusion (US, Europe ...) means that most of our students are familiar with and play at being Dr House. We have developed a diagnostic strategy course based on an episode of *Doctor House* by analyzing the hero's diagnostic strategy.

After a brief introduction to the scientific basis of the diagnostic strategy, part of an episode can be presented to the students and discussed. Guided by the teacher, students then analyze the strategy and correct it as a function of the test validity parameters and according to the most likely order of possible diagnoses (probability, "*severibility*", "*diagnosability*" and "*treatability*"). Another example based on real data is then presented to check whether the students have clearly understood these concepts.

In conclusion, it is interesting to imagine how our students' leisure activities can be used as teaching tools, even in medical sciences.

Reference

1. "House" home page (Official network site). *HOUSE, ™ © Twentieth Century Fox Film Corporation. All Rights Reserved. Available at* http://www.fox.com/house/ *[accessed 18th December 2008]*