

SHORT ABSTRACT

Getting Rid of Patients' Misconceptions about the Radiology Department Using Animated Video in the Waiting Room

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The aim of this study was to explore patients' perceptions of the role of the radiologist in their care and to evaluate if it is possible to get rid of misconceptions using animated video in the waiting room. 278 Patients were surveyed before or after the animation video was shown in the radiology waiting rooms. After watching the video, almost 30% more people understand that the examiner is the technician, not the radiologist. Patients who think their own physician will interpret the images lowers by a 3.5 factor. Owing to the video, many patients actually understand why they will probably not need to meet the radiologist. Of the patients that have seen the video, almost two thirds declare to experience more respect for the radiologist, without having to meet one.

Keywords: Radiology; Quality; Management; Survey; Animation; Video; Waiting room; experience; educate; technician; radiotechnician; misconception; MRI; X-ray; CT

Introduction

Because of modern imaging techniques and the high workload, radiologists seldom get to meet their patients anymore. Besides that, there are numerous TV shows where it seems as if all doctors do imaging interpretation themselves, without consulting with a radiologist. Many patients do not know the radiologist is a doctor and they often don't know the difference between a radiologist and a radiotechnician. Not understanding the medical qualifications of a radiologist could impact your patients' care – or their perception of care [1].

A study in the British Journal of Radiology found that 76% of patients think it is the radiologist that “takes the

x-rays”, 86% say radiologists are “not doctors” and 40% believe radiologists “play no role in patient care” [2]. Some would argue the radiologist has to start seeing more patients, others know that's not feasible. Isn't there an easier solution that does not increase workload?

Study

In the summer of 2019, a survey was conducted using tablets running Qualtrics software on 278 patients (122 men, 156 women) in 2 different hospitals (ZNA Middelheim & University Hospitals of Louvain). Patients were educated in the MRI, CT and X-ray waiting room by using animation video on already available TV screens (**Figure 1**).

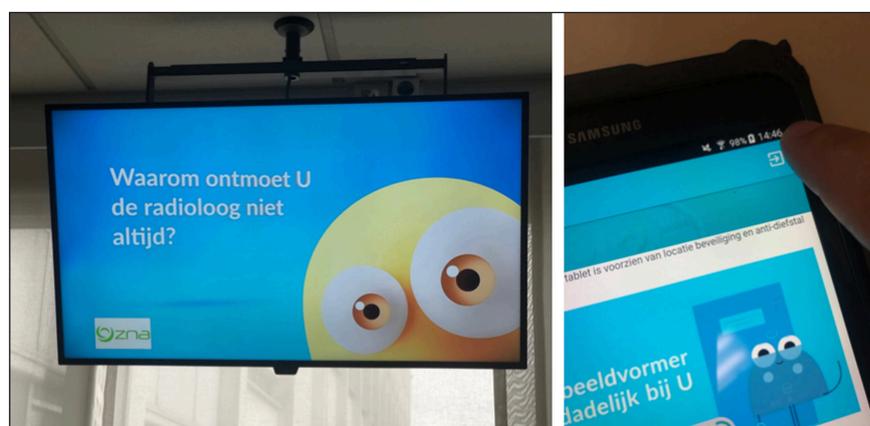


Figure 1: The survey was conducted on tablets using Qualtrics software, the video (in Dutch) was presented on already available TV-screens in the radiology waiting room.

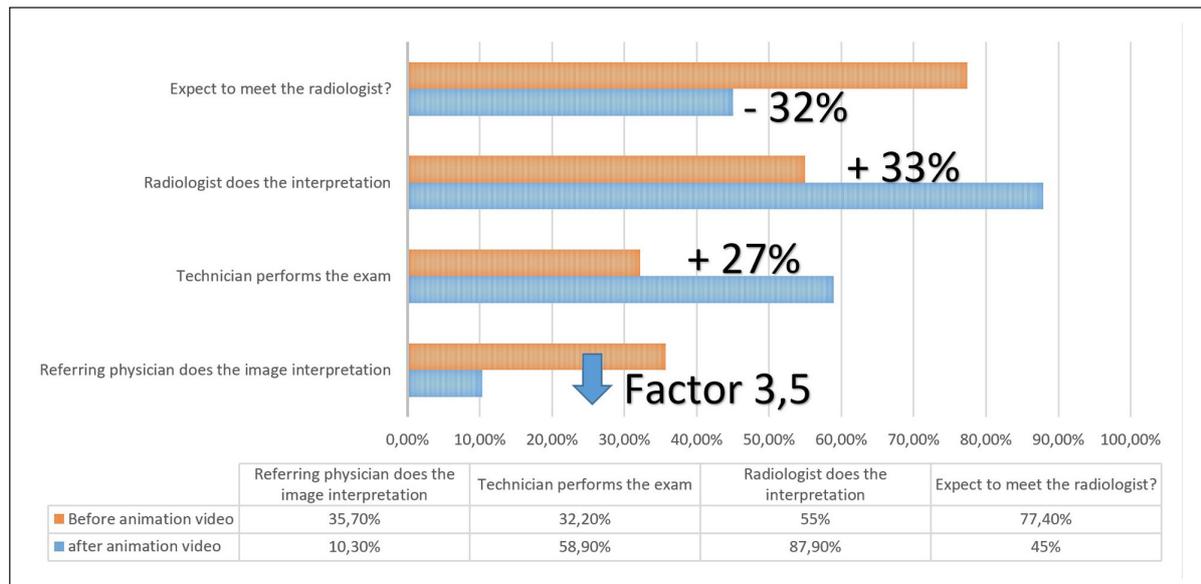


Figure 2: The change in patients' perceptions after seeing the animation video is prominent.

Every patient in the waiting room that was willing to, and able to, fill in the survey was included. The study was held on 7 randomly chosen summer dates, the first day(s) there was no animation video on screen. The day(s) after an animation video was shown on a wall-mounted TV, in loop, to other patients that also filled in that same survey. 107 Patients got to see the video, 171 patients did not. In the video the fact was stressed that the investigation will be performed by technicians and that afterwards a certified doctor, called a radiologist, will interpret the images. The video can be seen on www.makeradiologyvisible.com.

Results

Getting rid of misconceptions

When compared to the study in the British Journal of Radiology [2], Belgian patients are more aware of what a radiologist is, although the knowledge of the job is still very far from perfect.

Without the animation video, only one third of patients know the exam will be conducted by technicians, after seeing the video that number rises to almost 60%. Over one third of patients in the waiting room think the referring physician will do the imaging interpretation, after seeing the video that misconception in that same room lowers by factor 3.5. After the video, 32% less patients expect to meet the radiologist and 33% more patients realize the job of the radiologist is to actually interpret the images and make a report of the findings (55 to 87.9%) (Figure 2).

Some key numbers

Of those patients who got to see the video:

- 93.5% Better understands what a radiologist is and does.
- 52.3% Points out to be more at ease prior to their exam.
- 65.4% Find it to be of added value for their visit to the radiology department.

- 22% More patients realize the radiologist is a “true” physician (50.3% to 72.0%).
- Probably the most intriguing finding is that, because of the video, 67.3% claims to have more respect toward the radiologist.

Conclusion

Apparently, there are many misconceptions when it comes to radiology, probably based on the reality from the past. Radiologists now often have to explain that they have not been taking X-rays all day, that the job of the radiologist is to interpret images from different modalities, not to make them. To gain respect and awareness of the job, radiologists should not go see more patients. According to this study it is fair to say that one can educate the people that matter, being the patients in the waiting room, effortlessly, by using modern animation video techniques. It lets patients understand what is happening behind the closed doors of the radiology department so they better comprehend why they probably will not (need to) meet the radiologist. It ameliorates their time spent at the radiology department and over two thirds of patients even felt more respect for the radiologist, without actually meeting one.

Competing Interests

The author has no competing interests to declare.

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