

# vr in patient communication



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the  
simulation  
crew

Good communication is vital. Famous words in the office, and for sure no less valid in other environments. In the healthcare environment for instance good communication between healthcare workers is important and has been known to have its effect on overall patient safety. But there is even more. Good communication between the healthcare-worker and patient actually has an effect on the healing process itself. Research shows some confronting figures: if you manage to drop anxiety through the way you communicate, patients will have a more pleasurable memory of their treatment. When the anxiety patients experience during their treatment drops, so will the time they need to recover. Surprised? Well, apparently not only medicines can be healing to the body, words and body language can be too. VR can offer solutions for training these skills in a controlled environment.

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## So how does it work?

The human mind tricks the body sometimes. In medicine this is seen in the 'placebo' effect, which means in some cases the condition of patients is improved by taking a medicine, that does not contain any physiological active components. The trick here is that the patient believes the medicine works,

and apparently this belief helps in the treatment. Its counterpart exists as well, though lesser known, and it is called the 'nocebo' effect. Studies have shown that when patients expect a deteriorating effect instead of a healing effect of the treatment, some patients will experience a worsening of their condition, even though the medicine they received did not contain any active components. The expectations patients have with regards to their treatment apparently matters for the outcome, and it does not stop there. Also the quality of the patient-doctor relationship has been shown to invoke placebo-responses. It makes some experts argue to replace the term 'placebo/nocebo' for 'contextual effects'.

Taking into account 'contextual effects' in communication implies that one should avoid content -words and body language- that invokes negative expectations about the treatment. And instead healthcare-workers should affirm the positive expectations patients have. Combining this method with suggestive language, making contact through mirroring body language and diverting the attention, as well as other techniques applied in clinical hypnosis, can make the effect even stronger.

## The practice

The theory makes perfect sense, but how to apply this in practice? Avoiding phrases that can trigger a stressful response, like 'pain' or 'this may sting a bit', often are used to prepare a patient mentally for a coming treatment. Although the intention is meant well, the effect is opposite, because it makes the patient expect some sort of discomfort. For the



healthcare-worker breaking this 'good intended' habit can be difficult. Words have to be chosen far more consciously, and a slip of the tongue is easily made. In addition the theory says to mirror your own body posture with that of the patient, because it would help in steering the conversation on a subconscious level. Most people though are not aware of their body postures. Simply because you literally cannot see yourself like someone in front of you does. So adjusting your body language correctly to that of the patient is difficult and can even be counterintuitive.

*"Most people though are not aware of their body postures."*

So combining these verbal and non-verbal techniques, especially in the beginning, will be pretty demanding. And if adjusting your speech and body posture at the same time isn't already difficult enough, the next level is to actively steer the verbal and non-verbal conversation away from any stimulus that might imply stress for the patient. Something that could be considered quite challenging in the average healthcare setting, to put it mildly...

## VR offers solution

So obviously there is need to practice this. In a safe environment. Where no patient can be hurt, where no colleague watches over your shoulder. Where you are safe from opinions, and you get objective feedback from someone who has no interest other than teaching you how to execute and master the techniques. With endless patience; you can try again and again at your own pace.

VR can give you just that. In a co-creation project the Radboud University Medical Center and serious game company the Simulation Crew joined their expertise on destressing patient communication and VR-application development / didactics, respectively. A VR-based training solution was the result.

The application enables healthcare workers to practice patient comfort communication techniques in the safe environment of their own office or home. VR offers a total immersive experience and bring to life a virtual healthcare setting. VR glasses and controllers will let you experience the place as if you are really there. The patient to practice on is not real, he/she is an avatar, but reacts to what you say, reacts to your body posture and eye-contact. When

the patient is anxious, your job is to use patient destressing techniques to calm her down. In the first level the focus is on the verbal communication; you have to choose the right words to steer the communication. When you get distracted and make a mistake, the patient reacts, like a real patient would. After the session you get feedback on what went right and from which points you can learn. In the next level you have to mirror body postures and use the right words at the same time. Gradually you learn to apply the techniques in an natural way. Your virtual patient is giving you feedback after every session, telling you how she was affected by your language, both verbal and non-verbal. In addition to this feedback your performance is also measured in an objective way through a set of predefined communication rules. This enables the built-in virtual learning coach to give you tips on how to improve. You can challenge yourself with other patients, for instance a patient that is angry and hostile, because he had to wait a long time. Or just the opposite: a patient that is shy and evasive. Every patient will tell you how they experienced the interaction they had with you and whether your communication made a difference. Seems unreal? It is not.

### Oefening 2: Stemintonatie

Door meer rapport op te bouwen kun je de stress bij Anna verminderen. Bekijk de feedback en probeer jezelf te verbeteren.



Score

#### Spiegelen lichaamstaal



Je past je lichaamstaal onvoldoende aan. Probeer meer te bewegen, hiermee doorbreek je de spanning.

Coach

Are you Interested or do you have any questions?  
Please contact:

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