

Instructional DVD reduces MRI scan patients' anxiety and improves scan quality

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A DVD designed to help people prepare for a Magnetic Resonance Imaging (MRI) scan, including guidance on how to relax, led to more successful scans. The patients receiving the DVD also felt less anxious during the scan says a paper published in the *British Journal of Health Psychology*.

Lead author Dr Rachael Powell from The University of Manchester said: "A successful MRI scan requires the patient to stay completely still as movement can reduce the quality of the image taken and potentially affect diagnostic accuracy. However, staying still in the [scanner](#) can be difficult for some people, and some [patients](#) do not manage to remain in the scanner long enough to complete the examination."

Some 83 outpatients who were due to have a MRI scan were split in to two groups. Both groups received the standard MRI Centre information leaflet which included safety information, information related to the appointment, technical features of an MRI scanner, data protection and the experience that might be expected. Only one of these groups received the study DVD.

The DVD contained two sections. The first was 'Preparation for MRI' and included information about the procedures to expect, information about what the scan experience would feel like, a demonstration of a patient undergoing a scan, and information about others' experiences of having an MRI scan. The second section detailed relaxation techniques and encouraged patients to practice the techniques before and during

their scan. They were asked to watch the DVD at least once before their scan appointment.

Of the 41 patients who received the DVD, 35 had satisfactory scan outcomes. In contrast, in the other group with 42 patients, only 23 had satisfactory scans. A 'satisfactory' scan was one where patients successfully stayed in the scanner for the full examination and had high quality images (i.e. patient movement had not reduced [image quality](#)).

Dr Powell explained: "We found that the vast majority of participants found the DVD an easy format to use, with almost all participants viewing the DVD at least once, with over half the participants using it at least twice. Most of the participants found the DVD useful and said it helped them to feel less anxious and more confident about taking the scan.

"Given the high number of scans where either patients move in the scanner, reducing image quality, or where patients do not manage to stay in the scanner long enough to complete the examination, the finding that an affordable, acceptable and effective intervention can be sent to patients by post prior to their scan could have an important impact on patient care and [health care costs](#)."

More information: 'Improving magnetic resonance imaging (MRI) examinations: Development and evaluation of an intervention to reduce movement in scanners and facilitate scan completion':

[onlinelibrary.wiley.com/doi/10 ... /bjhp.12132/abstract](http://onlinelibrary.wiley.com/doi/10.../bjhp.12132/abstract)

Provided by British Psychological Society

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