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LETTER TO THE EDITOR

Patient Reported Outcomes in Interventional Radiology: Time to Measure What We Do

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"The best time to act on this was decades ago. The second best time is now"
—David Brin

Dear Editor,

We agree with the sentiments expressed by Makris and Uberoi [1] on patient reported outcomes (PRO) in Interventional Radiology (IR). IR therapies are being rapidly developed, evaluated and implemented. IR therapies have the potential to reduce mortality and morbidity; however, patient opinions have not been fully evaluated across the speciality. There has been an increased emphasis on outcomes reported by patients in various European healthcare funding bodies when considering service provision through value-based care. Patient perspectives are often equally weighted alongside clinical efficacy and patient safety when assessing treatment quality.

PRO are being increasingly used to assess the effectiveness of treatments. PRO are designed to understand patients views of their symptomology, physical function and health related quality of life at different time points [2]. They can assist clinicians to provide effective and patient centred care, and data can assess and compare the quality of service provision. PRO also offer a validated and scientifically rigorous method to collect data regarding patient satisfaction and quality of life. A wide range of patient data can be collected and used to understand both short and long term implications of a treatment, using tools such as pain scales, the extent to which normal function has been restored and satisfaction with treatment delivery and follow-up. Understanding these implications allows health service providers to improve the delivery of treatments and informs clinical practice. In the United Kingdom (UK), PRO data have been principally used in elective procedures. PRO data have proven to inform clinical practice in national audits of breast reconstruction, hip and knee replacements, groyne hernia repair, varicose vein surgery and coronary revascularisation [3]. PRO data are also utilised by the National Health Service (NHS) outcomes framework which help inform the NHS Commissioning Board and Clinical Commissioning Groups to fund services.

Validated PRO in IR have included improvement in mean symptoms and quality of life scores post treatment and a potential reduction in pain compared to the control treatments. The ATTRACT trial's secondary outcome included PRO [4]. This trial assessed quality of life using venous disease specific PRO at baseline and 24 months' post pharmacomechanical catheter directed thrombolysis for deep vein thrombosis. The majority of PRO in IR have

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been conducted in specific randomised controlled trials, thus the generalisability of results may be weak.

Development of distinct PRO questionnaires in IR that are specific for vascular, non-vascular and oncology could allow the start of widescale implementation. A European wide consensus and utilisation of these PRO have the potential to collect large sample sizes, and this is particularly important for niche or infrequently performed therapies. In the UK, the importance of providing IR therapies for oncology was highlighted following a Multicentre cross sectional study [5]. It concluded that large scale collaborative networks are necessary to develop national registries that can be used for commissioning novel services. PRO could potentially be used to further support the implementation of IR therapies nationwide.

Successful engagement in PRO is vital for the growth and development of IR as a clinical speciality in its own right. It can also prompt future randomised controlled trials testing proof of concept to consider using PRO as secondary outcomes. Collecting PRO data on large patient registries would also be beneficial in assessing real life patient outcomes. Indeed, the availability of robust PRO data would also be invaluable in negotiating with heathcare commissioning authorities or local health service providers with regard to funding for new services or expansion of existing services. The long term establishment of IR in the scientific and clinical communities is dependent on raising awareness of its value, and PRO are key to achieving this.

Compliance with Ethical Standards

Conflict of interest None.

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