



# Current Practices & Attitudes of Dental Practitioners Regarding the Provision of Dental Treatment for Patients with Solid Organ Transplant

O'Leary Fiona; Coffey N, Burke FM, Roberts. A, Plant. B, Hayes M

Cork University Dental School and Hospital, Cork, Ireland



## Background

The number of solid organ transplants is rising each year<sup>1</sup>. Prevention of post operative sepsis is critical to the success of the transplant<sup>2</sup>. Infections arising from an odontogenic origin are a justifiable concern given that there are over 700 different microbial species in the mouth<sup>3</sup>. Good dental and oral hygiene can help minimise the risk of bacteraemia<sup>4</sup>. Prior to undergoing a solid organ transplant, patients are required to receive a certificate of dental health clearance. 'Dental health' is an ambiguous term, it does not account for infections that may arise in the subsequent weeks or months after a transplant. There are currently no guidelines or protocols for both medical and dental practitioners to reference or follow when providing a certificate of dental health. Considering that many oral conditions are chronic e.g. Periodontal disease; will dental practitioners be able to certify dental health? This cross-sectional survey was part of an ongoing study assessing the oral health of adults with cystic fibrosis.

To ascertain the current practices and attitudes of dental practitioners regarding the provision of dental care to recipients of a solid organ transplant.

## Methods



- Full ethical approval (ECM 03/2022 PUB) was granted by the Clinical Research Ethics Committee of Cork Teaching Hospitals (CREC).
- The study was conducted in accordance with the Declaration of Helsinki - Ethical Principles for Medical Research involving Human Subjects and UCC Ethics of Research



- Dental practitioners in Ireland were invited to complete an online questionnaire.
- The following professional associations were asked to distribute the questionnaire to their members; the Irish Association of Oral Surgeons, the Orthodontic Society of Ireland, and the Irish Society of Periodontology.
- Social media channels used to highlight the larger study 'assessing oral health in adult with cystic fibrosis' were also used to invite participants to undertake the survey



- The online questionnaire consisted of 56 questions and multiple-choice answers. It was developed after PPI with representatives from the dental profession.
- Thirteen questions were specifically dedicated to the provision of dental care for patients in need or in receipt of a solid organ transplant.
- All the data collected was anonymous and IP addresses were not collected, so participant involvement was anonymous.

**Keywords**  
Solid Organ Transplant, Oral Health, Certification of Dental Health, Dental Fitness, Health Education

## Results

Data was collected from one hundred and thirty five dental practitioners (n=135). The survey respondents included general dental practitioners, oral surgeons, periodontists, orthodontists, community dentists, and endodontists. The results are outlined in *Table 1*

Provision of Dental Care	
Currently provide or have provided care	34%
Have not provided care	61%
Do not know	6%
Provision of Dental Health Certification	
Provided certification	29%
Have not provided certification	66%
Do not know	5%
Guidance from the patient's medical team regarding dental health certification	
Received guidance	11%
Did not receive guidance	81%
Do not know	8%
Are current guidelines on pretransplant dental health certification adequate?	
Yes	12%
No	88%
Are the Prescription of Prophylactic Antibiotics for Dental Treatment of Solid Organ Transplant recipients appropriate?	
Yes	36%
No	18%
Unsure	46%

Table 1: Study questionnaire results

## Conclusions

- The information ascertained in this questionnaire demonstrates an absence of standardised dental practice in relation to the provision of dental health certification for solid organ transplantation and the provision of dental care to recipients of solid organ transplants.
- While most respondents did not currently or previously provide dental care for transplant recipients, a significant percentage of respondents did (34%). It is fair to assume that with an annual increase in the number of transplant procedures performed both in Ireland and globally, dental practitioners will encounter more of these patients in the future.

## Clinical Implications

- Patients with conditions that may necessitate a solid organ transplant should be placed on an oral health programme so that oral diseases can be prevented.
- Further research should be conducted to ascertain the full effects that oral health has on solid organ transplants. This may form the basis for standardised guidelines and treatment provision.
- The inclusion of dental practitioners as part of a patient's multidisciplinary team would ensure that all decisions regarding the patient's oral care and treatment are made in conjunction with the patients specialised team.

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