Supportive Periodontal Therapy: Perceptions of General Dental Practitioners

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Background

- Supportive periodontal therapy (SPT) or periodontal maintenance is prescribed following the completion of active periodontal treatment and continues at varying intervals throughout the patient's lifetime[1].
- SPT or periodontal maintenance entails an update in the medical and dental history, full clinical examination, radiographic review, scaling and selective root surface/implant debridement, and a review on oral hygiene efficacy[2]. However, there is insufficient high quality evidence on the best approach to SPT[3].
- The therapeutic goals of SPT are to prevent or minimise recurrence of disease progression, to reduce the incidence of tooth or implant loss, and to increase the probability of locating and treating other oral conditions or diseases efficiently[2].
- In the United Kingdom, many patients are referred to the hospital for specialist periodontal care. Whilst, ideally, it is preferable to continue the provision of SPT within the specialist environment, demands on the hospital services and resource allocation make this difficult, resulting in patients being discharged back to the referring practitioner for SPT.
- It has been demonstrated that periodontal maintenance provided by a GDP can be expected to have a similar outcome as by a specialist, provided that the GDP is given specific instructions regarding the maintenance regime[4]. Factors affecting the GDP providing SPT include communication, problems with diagnosis, the understanding of SPT and its role in prevention of further periodontal disease progression and these if not corrected could have extensive implications for hospital departments.

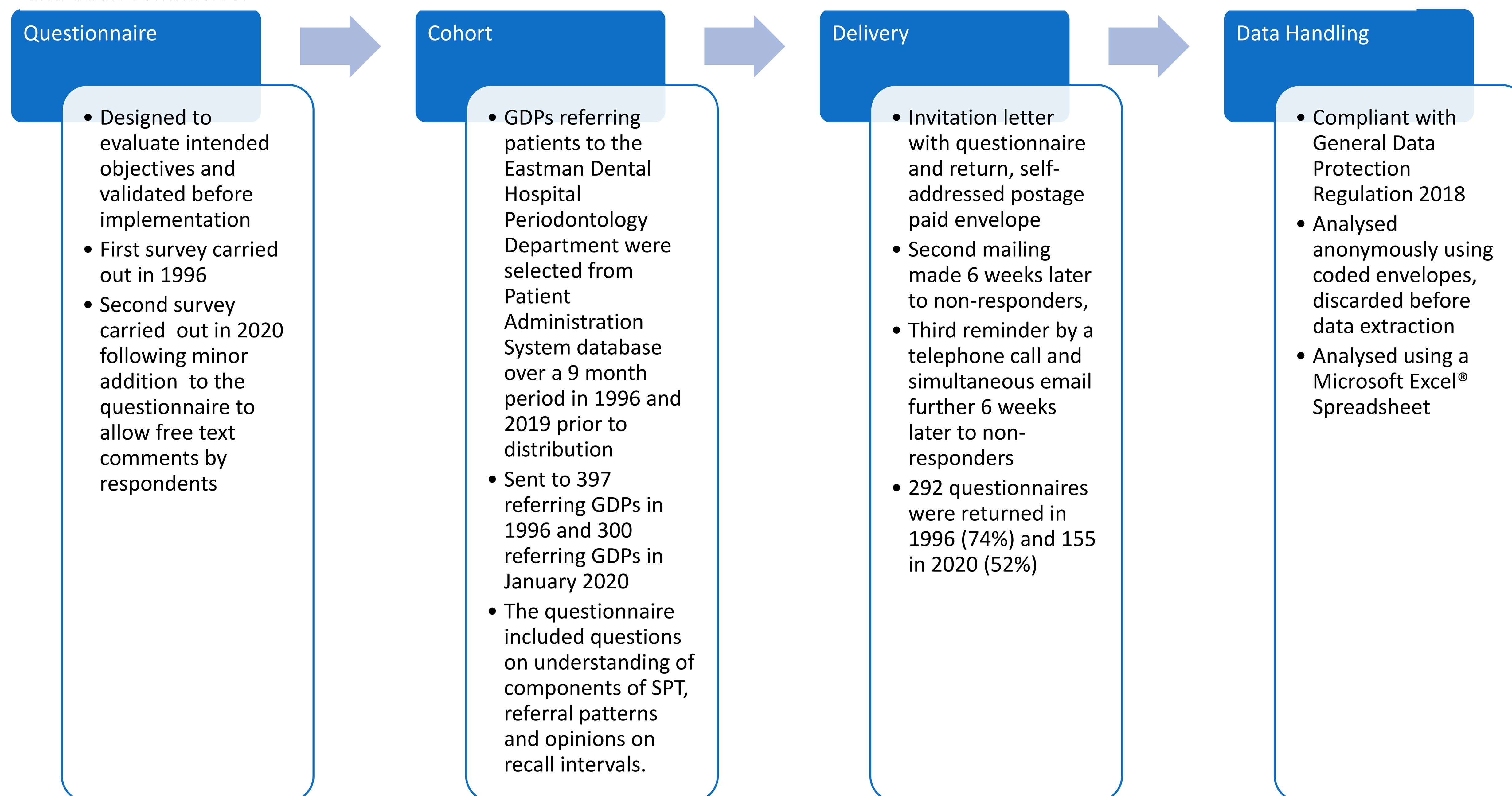
Aim and Objectives

Investigate the change in the perception and understanding of supportive periodontal therapy of General Dental Practitioners.
Primary Objective: Change in the perception and understanding of supportive periodontal therapy

Secondary Objective: Change in opinion of the ideal recall interval
Secondary Objective: Change in the perception of who is responsible for SPT

Methodology

As this was an outcome-based questionnaire audit, ethics approval was not needed; approval was obtained from the local governance and audit committee.



Results

Perception and Understanding of SPT

In 2020, 49% responded that the components of SPT included soft tissue examination, oral hygiene instruction, scaling and polishing, and probing pocket depths with plaque and bleeding indices compared to 42% in 1996 (Table 1). 28% of GDPs in 2020 indicated that recall intervals for SPT need to be customised which was similar to views in 1996, whilst 47% in 2020 preferred 3-6 month recall intervals compared to 40% in 1996 preferring ≤3 months (Table 2). In 2020, 97% rated SPT as highly important and 3% as moderately important for the success of periodontal therapy, similar to 1996.

Table 1: GDP perceived components of an SPT visit

Understanding of the term periodontal maintenance care	Percentage in 1996	Percentage in 2020
Soft tiss†, S+P and OHI‡	7	3
Soft tiss, S+P and OHI, PPD; PI and BI§	42	49
Soft tiss, PPD only*, S+P and OHI	10	4
Soft tiss, PPD; PI and BI	1	0
S+P and OHI, PPD; PI and BI	16	16
S+P and OHI, PPD; PI and BI, PPD (only)	1	0
Soft tiss, S+P + OHI, PPD only, comment	1	1
Soft tiss, S+P and OHI, PPD; PI and BI, comment	1	0
S+P and OHI (only)	6	8
PPD (only)	1	0
S+P and OHI, PPD (only)	3	0
Soft tiss, S+P and OHI, PPD; PI and BI, PPD (only)	4	6
PPD; PI and BI (only)	0	5
Soft tiss, S+P and OHI, Rest **	0	1
S+P and OHI, PPD, PI and BI, Rest	0	1
All options	3	5
Did not answer the question	4	1

Key for Table 1

† Examination of the soft tissues of the mouth and teeth

‡ Supra and/or subgingival scaling, polishing and oral hygiene instruction

§ Periodic full mouth probing pocket depth assessment with plaque and bleeding indices

* Periodic full mouth probing depth only

** Examination of the restorations

Table 2: GDP opinion of the ideal recall interval

Interval	Percentage in 1996	Percentage in 2020
Never	2	0
≤ 3 months	40	23
3-6 months	25	47
6-12 months	1	2
≥ 12 months	0	0
At the patient's request	2	0
Customised	30	28

Responsibility of SPT

The respondents reported that they refer predominantly to both the hospital and private specialist providers. In 1996, 57% referred to the hospital and 28% to private specialist providers, however in 2020, 51% referred to the hospital and 31% to private specialist providers. Regarding patients referred to a hospital, 68% of respondents were aware of patients being discharged back to their care on completion of treatment. 51% of patients referred to a hospital received a discharge summary detailing the requirements of supportive periodontal maintenance. 70% in 1996 and 74% in 2020 of GDPs indicated that it was their responsibility to provide SPT. 16% of the respondents (identified by the asterix in Table 3) indicated that SPT was not their responsibility in 2020. The 3% of free text comments suggested that the hygienist and patient were responsible for SPT.

Table 3: Perceptions of who was responsible for SPT

Whose responsibility was SPT	Percentage in 1996	Percentage in 2020
GDP only	70	74
Hospital only*	2	5
Specialist Practice only*	6	7
All three	8	3
GDP and hospital only	5	1
GDP and Specialist practice only	3	6
Specialist and hospital only*	3	1
Comments only*	2	3
Question not completed	1	0

* GDPs who do not think SPT was their responsibility

Conclusion

The data shows that of the responding GDPs:

- Majority rated SPT to be highly important for the success of periodontal treatment over the last 25 years.
- Just under 50% of them understood most of the components of SPT, however, despite this 17% did not consider recording plaque and bleeding indices was an essential part of SPT.
- 28% understood the need for customised SPT recall intervals.
- Whilst the majority agreed SPT was their responsibility, at least 16% it was not their responsibility.

Whilst the majority have an understanding of SPT, the potential limiting factors for the provision of SPT include a lack of a discharge summary detailing the requirements for SPT and the current funding system within the General Dental Services. Other factors for re-referral during SPT include resistant periodontal disease or if further advanced surgery is thought to be required[5]. If the cost effectiveness and treatment outcomes of periodontal interventions provided within hospital settings are to be sustained, clear discharge protocols need to be provided and GDPs will need to be engaged in education to drive SPT forward. Additionally, it is imperative that any future changes in the primary health care system allow for the delivery of tailored SPT. Further research is required to evaluate the specific barriers to provision SPT within primary care other than the remuneration.

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Contributions
1. Dr Shivani Rana: Lead author and researcher undertaking collection and analysis of 2020 data and preparation of the paper
2. Dr Richard Tucker: Second author and researcher, undertook collection and analysis of 1996 data
3. Dr Ulpee Darbar: Supervising author, reviewing the paper

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BSP British Society of Periodontology and Implant Dentistry