The First Implant Placement Experience for European and Asian Dental Practitioners

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Introduction
The pathways to develop competences related to practice of implant dentistry are diverse and differ significantly in different parts of the world. Consensus meetings organized by various institutions and professional associations have shaped educational pathways, but the fact remains that clinicians acquire the necessary competences in a very diverse curriculum structure.

Aim and Significance
The aim of this study was to compare and evaluate the education and experience of dentists prior to the placement of their first dental implant in Europe and Asia. Pre-operative training, learning and practice environment as well as important clinicians’ perceptions were also analysed. Better understanding of conditions evaluated in this study could lead to improvements in teaching and practice of implant dentistry world-wide.

Materials and Methods
A cross-sectional study design was approved by the Institutional Ethical Review Board of University of Hong Kong. The compiled survey consisted of introduction and consent page, followed by 25 questions grouped into four categories: demographic data, education, first dental implant placement experience and professional guidance. The instrument was hosted on Tufts University Qualtrics online platform and was distributed through email and social media networks over a period of eight months.Clinicians’ first dental implant placement experience was evaluated using an online questionnaire with bivariate, multiple and open-answer questions. Descriptive statistics with means and percentages was analysed and compared in order to assess the participants’ feedback in countries from Europe and Asia. A further study will present the results of the subjects from other continents.

Results
The questionnaire was initiated by 567 individuals, but only 399 were practicing in either Europe or Asia. The rest of the subjects were practicing in other countries, and those results will be compiled in a further study. 193 dentists in 28 countries in Europe (F/M = 58/135) and 206 dentists in 27 countries in Asia (F/M = 76/130). The main countries taking part in the study in Europe were Greece (n=68), Germany (n=30) and United Kingdom (n=13), and in Asia were India (n=46), Hong Kong (n=29) and China (n=24). More than half of the participants in both Europe (54.4%) and Asia (54.37%) were general practitioners, and the majority had completed a postgraduate program (57.28% for Europe and 67.36% for Asia). For the majority of the participants, the first implant was place 0-2 years after graduation (39.46% for Europe, 37.38% for Asia). Advanced training in this field was pursued (84.32% for Europe, 79.61% for Asia).

Conclusion
Despite the high number of countries taking part in the study, and the various cultural and educational differences between nationalities, the first implant placement experience was shown to be similar for dentists in Europe and Asia. A better understanding of these conditions could lead to improvements in the teaching and practice of implant dentistry. Continuation of the study will be performed by including an increased sample size, in order to compile a broader perspective on the current status of dentists implant training and preparedness for offering dental implant treatment to their patients.

Fig 1: Country of practice

Fig 2: Further training after placing first implant in Europe (left) and Asia (right)

When placing their first dental implant, dentists received mostly one-on-one assistance by an instructor (67.24% for Europe, 67.48% for Asia), and prepared for the intervention mainly by performing clinical examination (86.21% for Europe, 86.25% for Asia), case discussion with an instructor (67.24% for Europe, 81.56% for Asia) and 2D radiographic examination (62.64% Europe, 71.36% Asia).

Fig 3: Preparation for first implant case prior to the procedure (blue) and Asia (red)