& PROFESSIONS PROFESSIONALISM

ISSN: 1893-1049 Volume 5, No 3 (2015) http://dx.doi.org/10.7577/pp.1324

Giovanna Vicarelli, Elena Spina

Professionalization and Professionalism: The Case of Italian Dentistry[1]

Abstract: The aim of this article is to reconstruct the process of professionalization of Italian dentists and the profession's current configuration. It is based on three lines of inquiry. The first line adopts a historical perspective through the analysis of legislation that has regulated the dental sector over time. The second line depicts the current configuration of the profession through institutional and sectoral statistics. The third line focuses on the impact of the 2008 economic crisis, using the main findings of a survey conducted among the profession's representatives. The economic crisis has exacerbated the profession's structural weaknesses caused by the difficulties associated with self-regulation and by organizational–managerial inefficiency. Given this situation, one may inquire as to the actual professional nature of dentistry in Italy: It is not pointless to ask whether—and, if so, what type of—professionalism exists in dentistry in Italy today.

Keywords: Italian dental profession, professionalization, professionalism, economic crisis, occupational change.

Giovanna Vicarelli,
Department of Economic and Social Sciences, Università Politecnica delle Marche
Ancona, Italy

Elena Spina,
Department of Economic and Social Sciences, Università Politecnica delle Marche
Ancona, Italy

Contact:
Elena Spina,
Department of Economic and Social Sciences, Università Politecnica delle Marche,
Piazzale Martelli 8, 60121
Ancona, Italy
e.spina@univpm.it

A few years ago, while conducting a historical review of international sociological research on health and medicine, Exley (2009) noted the lack of studies relating to oral health and dental healthcare (Rigal & Michau, 2007). Despite the social importance of the topic and the presence of a broad occupational category, for more than 40 years "sociology has shown relatively little interest in exploring the mouth, or in engaging with dentistry: a sociology of the mouth remains absent" (Graham, 2006, p. 53). A similar situation can be seen in sociological studies in Italy. Although there is growing interest in the study of the medical profession and its changes (Speranza, Tousijn, & Vicarelli, 2008; Tousijn, 2000; Vicarelli, 2008, 2010), there are relatively few studies on dentists or oral health (Orzack, 1981; Speranza, 1992; Tousijn, 2000).

The scant attention paid to the study of the dental profession is matched by the idea that dentists were once considered "artisans." Moreover, the professionalization of dentistry has happened somewhat belatedly or gradually in many European countries (Adams, 1999; Larkin, 1980; Kuhlmann, 2003; Nettleton, 1992; Thorogood, 2002). Studies on medical dominance discuss medicine's success in "limit-

Received: 16 Feb 2015

Accepted: 20 Aug 2015

[1] This paper is the result of the joint work of the authors. However Giovanna Vicarelli wrote "Hypotheses and method" and "The historical roots of dentistry in Italy" while Elena Spina wrote "The dental profession today" and "Dentists and the economic crisis". "Conclusions and future perspective" has been written by the two authors.

ing" the scope and powers of other occupations and professions (Freidson, 1971; Larson, 1977; Starr, 1982; Tousijn, 2000). Although rarely considered in studies on medical dominance, Willis (1983) holds that dentistry, like pharmacy and optometry, has been limited by the medical profession. However, Adams (1999) argues that the degree of independence possessed by the dental profession in countries such as Australia, Canada, and the United States sets dentistry apart from other occupations that have come under medical dominance.

However, studies indicate that the level of professionalism achieved by dentists is limited even in countries where the profession is well established today (Masella, 2007; Mathewson & Rudkin, 2008; Welie, 2004). Thorogood (2002), for example, shows that dentistry in England long exhibited three of the four features deemed necessary to be a profession: a recognized body of knowledge, professional monopoly, and clinical autonomy. In fact, the code of ethics for dentists was very different from that for doctors and had less impact on practice.

Finally, the debate on neo-professionalism (Evetts, 2012) also seems to have neglected this field of study (Thorogood, 2002). Over the last two decades of the 20th century, however, professionals were exposed in the workplace to the increasing routinization, rationalization, and commodification of their work, which was increasingly demystified and discredited in the wider political economy, as well as in the social system (Muzio & Kirkpatrick, 2011; Noordegraaf, 2007; Saks, 2012; Svensson, 2006). In this context, there was the strong impression that the trajectory of change for the professions was, inevitably, one of long-term decline. Yet professions have been able to develop new patterns of organization and new modes of operation that are more suited to the new ideological and institutional climate (Muzio, Ackroyd, & Chanlat, 2007; Saks, 2012). This process of transformation has been analyzed at the theoretical level by the sociology of professions and organizations, which has sought to identify the forms and types of the current changes. With regard to the health sector—despite the debate that has developed over new medical professionalism (Dent & Whitehead, 2001; Moffatt, Martin, & Timmons, 2014; Speed & Gabe, 2013)—the changes that have occurred in the various segments of the profession appear to be largely unexplored. It seems evident that not all occupational groups within the category have addressed and reacted in the same way to the process of managerialization. The dental profession, for example, seems to have remained largely extraneous to these processes, with dentists in many European countries working as independent professionals or on contract with the health system (public or private).

However, owing to the 2008 economic crisis, which has had a strong impact on access to health services in Europe, sociological interest in dental care is growing. One wonders how and by what means dental health can be ensured in situations of scant access to private services and restricted access to public ones. In this context, the types of involvement exhibited by dentists and their attitudes to health services become aspects for new evaluation and analysis (Crall, 2006; Evans, 2006; Garetto & Yoder, 2006; Ozar, 2006).

Hypotheses and method

Based on the background information outlined in the previous section, the research for the present study was conducted to reconstruct the development of the dental profession in Italy and its current configuration. This research was conducted with a neo-Weberian approach that was adapted to the specificities of the Italian context. Research on the professions carried out during the 1990s identified two main types of professionalization: one Anglo-Saxon, the other Continental (Burrage, Jarausch, & Siegrist, 1990; Jarausch, 1990; Siegrist, 1990; Torstendahl, 1990). In the Anglo-Saxon type of professionalization, the action of a professional group initially en-

tailed operating in the market, seeking a monopoly from the state, and maintaining large autonomy and control over its working conditions. In the Continental type of professionalization, bureaucratic hierarchies transformed themselves into professions under pressure resulting from the acquisition of academic qualifications and the competition with dominant nobiliar groups for power and high social status (Collins, 1990). These two models, which were constructed with attention to historical–social data, highlighted the dominance in the professionalization process of two combined forms of regulation: the market and the professions on the one hand and the state and the professions on the other.

In this framework, Italy seems to have, at least with regard to the medical profession, a third model that arises from regulation centered on the power of clans and professions rather than that of the state or the market (Vicarelli, 2010), This model is derived from the application of the analyses conducted by Ouchi (1980) and Williamson (1975) to the study of professions. Williamson argues that the two main mechanisms governing transactions with other economic actors are the market and the hierarchy, each of which responds to specific needs. Ouchi adds a further regulatory dimension—that of the clan—which is a collective entity, not necessarily economic, that develops a keen sense of belonging and identity in individuals through norms of reciprocity. Ouchi's thesis is that the clan is particularly suited to governing long-term transactions and dealing with situations of ambiguity, although it may coexist with the market and hierarchy modes within the same organization. In Italy, given the weakness of healthcare markets and the limited intervention by the state as the guarantor of social protection, doctors based their identity and professional legitimacy on the strong clan for most of the 20th century. Clan links enabled doctors to maintain a strong sense of identity in contexts of great uncertainty and institutional change; they were a social capital to be used for career progression and professional power. In addition, clan links were the basis of the administrative and political power through which Italian doctors directed and managed health policies over time.

Within this context, our research questions are formulated as follows:

1. Has the medical profession influenced the process of professionalization of Italian dentists in the long term? What roles have the state, the market, and the community played in this process?
2. Thirty years after receiving institutional recognition, how does the Italian dental profession appear today?
3. How and to what extent is the current professional configuration of dentistry able to overcome the economic difficulties arising from the economic crisis that has affected Italy since 2008?

We used primary and secondary sources to answer these questions. A first line of inquiry involved adopting a historical perspective based on the legislation that has regulated the dental sector in Italy so as to reconstruct the path followed by the professionalization of dentistry in Italy. A second line of inquiry sought to reconstruct the current configuration of the profession by using institutional and sectoral statistics. A third line of inquiry focused on current trends in the profession with regard to the impact of the economic crisis. A quantitative survey was distributed to the presidents of the Italian Provincial Boards of Dentistry in 2013. Interviewing the focus group members was useful in gaining a clearer picture of the profession's situation. On the basis of the participants' suggestions, the research unit created a semi-structured questionnaire that was distributed during a national meeting held in Rome in May 2013; 66 of 105 presidents of the Provincial Boards of Dentistry answered the self-completion questionnaire, yielding a response rate of 63%.

The results obtained from the three lines of inquiry described in the preceding paragraph are presented in the following sections.

The historical roots of dentistry in Italy

The professionalization of Italian dentists developed slowly and with great difficulty through three different phases: those of uncertainty, medical dominance, and professional autonomy. The first phase of "uncertainty" (1861–1923) corresponded to the liberal period in which public health policies were very limited and healthcare was largely delivered by nonprofit organizations (charitable institutions and self-help/mutual-aid associations). The enacted rules allowed the practice of dentistry with either a medical degree or a specific diploma. However, universities were permitted to issue degrees in dentistry to nonmedical professionals without any regulations on the curricula. This resulted in a confused situation because the curricula varied greatly from university to university.

In the last years of the 19th century, physicians were able to impose legislation requiring those practicing dentistry to hold a degree in medicine (Royal Decree No. 6850, 1890). The decree remained largely inoperative until 1912, when Law No. 298 confirmed that possession of a degree in medicine and surgery was necessary to practice dentistry.

The efforts of a small group of doctors practicing dentistry had no effect on obtaining appropriate legislation. In 1922, Angelo Chiavaro, the first full professor of clinical dentistry in Italy, proposed, together with Minister of Education Giovanni Gentile, a bill (No. 1601, December 3, 1922) that provided for the establishment of the Royal School of Dental Medicine in Rome. Thus, on the basis of the American model, a faculty of dentistry with the authority to issue diplomas of doctor of dental medicine would be created (Decree No. 2910, 1923). However, coinciding with the rise of fascism in Italy, the provision was withdrawn in 1923. Indeed, fascism, which was based on the consent of the middle classes, could not ignore the requests from physicians, nor those from academic elites, who opposed the autonomy of the dental profession. Hence, more than 60 years after Italy's unification, and coinciding with the decline of liberal governments, it was definitively established that the profession of medicine included that of dentistry. Thus, a degree in medicine was sufficient to practice dentistry, which meant that any graduate in medicine—and, therefore, primarily general practitioners as nonspecialists—could be dentists.

In summary, during a phase of residual welfare, the Italian state did little to regulate the dental profession. An elite group of dentists, all male, claimed a specific professional role outside the dominance of medicine; however, the timing of this claim coincided with the very end of the liberal period and, hence, was too late. The advent of fascism led to the rapid enforcement of the previous legislation, which allowed only physicians to practice as dentists. In this uncertain situation, ample space remained for unlawful practice and for the power of clans to which doctors were affiliates.

The second phase of medical dominance (1924–1984) coincided with both the Fascist period and the years of the First Republic until 1985, when the figure of the dentist was established. As a demonstration of fascist interest in dental care, Mussolini inaugurated the Eastman Dental Clinic in Rome in April 1933. This clinic was established with funds donated to the Italian government by George Eastman, the American owner of the Eastman Kodak Company. The aims were to provide dental care to disadvantaged groups of pediatric age and to start a postgraduate dental school under the direction of Antonio Perna, a leading figure in dentistry in Rome who had close links with the leadership of the National Fascist Party.

Throughout those years, the medical role in the dental sector was consolidated further with the defining of specialization courses as well as auxiliary figures, especially that of the dental technician. This figure was established as an auxiliary to the health professions in 1934. Schools for dental technicians were created in the 1950s but without first establishing the appropriate number of students to educate, resulting in an excess of technicians transitioning into the odontoiatric field, despite this being illegal. However, the amnesty continued, and the growth in illegal

practice became increasingly difficult to control. As the dental discipline developed during the second half of the 1950s, the first scientific societies were established, but the profession was considered the fifth wheel in the Italian health sector.

During the 1960s and 1970s, no changes were made to the profession. As Speranza (1992) reports, around 9,000 general practitioners were providing dental care in 1976, with nearly 4,000 of them working part-time and the other 5,000 working full-time. At that time, there were around 8,000 specialists in dentistry and dental implants. For all intents and purposes, the unauthorized practitioners worked as professional dentists. They were typically dental technicians, often not even graduates. The Criminal Code art. 348 imposed small pecuniary penalties for malpractice, but these penalties were not enough to deter the unauthorized practitioners from working as dentists owing to the high incomes guaranteed by professional practice, the shortage of professionals in relation to demand, the tolerance of the institutions responsible for monitoring, and the low social consciousness in the dental care sector (Corradini & Zampetti, 2010).

In summary, this second phase of "medical dominance" coincided with the implementation of a mutualistic and meritocratic welfare system. The health insurance system was in fact created during the Fascist period, and it continued after the Second World War when Italy became a democratic republic. Health insurance initially covered a limited number of employees, but eventually it extended to include almost all the population. However, very different regulatory schemes were maintained for each occupational sector, and the unclear use of resources largely controlled by political parties persisted. Doctors had more work opportunities than in the past, but they had to combine different activities (general practice, specialist medicine, public health, and hygiene) to achieve high levels of income. Dentistry was one of these activities that guaranteed high earnings with scant specialization. It was an activity that doctors did not want to be regulated, and it was covered by health insurance only for the most marginal social groups that were unable to afford dental care.

The third phase of a progressive increase in autonomy in dentistry (1985 to the present) coincided with the creation of Italy's National Health Service. During this time period, the harmonization of European educational qualifications also occurred. In addition, the basis for the professional profile of dentists emerged in Italy, albeit with great delay and considerable difficulties (Orzack, 1981). According to Speranza (1992), five actors should be considered: the Italian Association of Specialist Dental Practitioners (AMDI), the various Italian associations of general practitioners, the Italian government, the institutions of the European Economic Community (EEC), and the various associations of dentists from European member countries belonging to the European Union Dental Liaison Committee (EU DLC) the Liaison Committee. Initially, the AMDI's concern was to restrict the field of dental care to specialist doctors only so as not to share the labor market with general practitioners and unauthorized ones. For this reason, the AMDI did not join the EU DLC, formed in 1961, and sought to obtain a professional monopoly from the Italian government. No results were achieved in this regard, especially owing to the power exerted in Italy by general practitioners in both political and associational terms (Vicarelli, 2010). The AMDI then changed its tactics and joined the EU DLC, which could now exert pressure on the EEC as a representative of all countries. The EU Council issued two directives that the Italian government was forced to adhere. The degree course in dentistry was established in 1985 within medical schools, and the professional order was established in conjunction with that of doctors (Law No. 409). In each provincial order of doctors, there was a separate professional register for graduates in dentistry who had passed a specific state examination, thus qualifying them to practice (art. 4). The provincial order of doctors and the national federation of doctors assumed the denominations of the Provincial Order of Physicians and Dentists (Ordine provinciale dei medici-chirurghi e degli

odontoiatri) and the National Federation of the Orders of Physicians and Dentists (FNOMCeO) (art. 6), respectively. Practitioners enrolled in the registry of dentists elected a Commission Accredited Dentists (CAO), composed of five members and a president. The first to be elected became part of the Board of the Order of Physicians and Dentists.

The third phase of the professionalization process happened at a time of extreme economic difficulties, which prompted the rationalization of spending after the increases that had occurred during the mutualist period. The lack of adequate resources and power available to general practitioners meant that dental care fell largely outside public coverage, despite the creation of a universal welfare system. The situation did not change in the following years when health policies underwent a reductive transformation (Enthoven, 1988; Radcliffe & Dent, 2005; Saltman, Bankauskaite, & Vrangbaek, 2007; Vicarelli, 2005, 2015); as a consequence, dental care remained excluded from public coverage.

How can the path of professionalization of Italian dentists be explained? On the one hand, the long period of non-public engagement in the healthcare sector has to be considered. This period was characterized by ambiguous rules, which were often not applied owing to path dependency and to the difficulties of building the new state from an administrative point of view. In other words, the governing bodies had no clear vision of the roles of the two professional groups (doctors and dentists) within a precise framework of social and health policy. The lack of a clear vision of their roles prompted doctors and dentists to find an employment niche for themselves in a country with a weak economy. Moreover, the weakness of the Italian medical profession and its oversupply of physicians, compared with the needs of the country, supported the position of those who considered dental care to be an area of medical jurisdiction (albeit of lower rank than medicine). General practitioners occupied a central role and, for a long period of time, led the professional associations and considered dental care to be their own field of interest. However, many dentists felt that they could expand their bargaining power and, in particular, their professional legitimacy by supporting doctors. Because they were much more numerous, general practitioners were in a position to claim more forcefully the occupational recognition of the entire category. Nor did the universities play a progressive role in the field of dental care. They remained anchored to traditional forms of medicine and, with few exceptions, were uninterested in scientific and technological innovations. Finally, dentists did not support the battles being fought by doctors for the lower classes and expanded health protection. They regarded themselves as belonging to a level of medical specialty higher than that of the politically engaged general practitioners and occupational physicians. Given the high costs of the private sector, the population turned to general practitioners who practiced dentistry without qualifications and to dental technicians who practiced illegally. The Italian process of professionalization was therefore very different from those that were developed in the United States (O'Shea, 1971), in Great Britain (Richards, 1971), in France (Vidal, 2008), and in Ontario, Canada (Adams, 1999, 2005), where research on the rise of dentistry and medical–dental relationships reveals that medicine did not dominate dentistry to the extent that it did other healthcare occupations. By contrast, dentists in Italy tried to gain status by associating themselves with the medical profession and its knowledge base. In so doing, dentistry did not provide a challenge to medicine; rather, dentists seem to have accepted its knowledge base and claims to expertise completely (Adams, 1999). The closure strategies of the medical profession were mainly directed against women (Vicarelli, 2008) so that in Italy, unlike in Germany (Kuhlmann, 2003), there were almost no female dentists until the 1980s.

The dental profession today

A comparison of the ratios of dentists to active inhabitants in European countries shows that the Italian situation is not an anomaly in Europe today. With 1 dentist per 1,042 residents (National Association of Italian Dentists (ANDI), 2013), the Italian ratio is consistent with the European average of 0.9 dentists per 1,000 residents (Organisation of Economic Co-operation and Development (OECD), 2013) and is well above the standard of 1 dentist per 2,000 residents recommended by the World Health Organization (WHO). According to data provided by the FNOMCeO, 58,095 dentists were registered as of April 2012, showing a significant increase from 39,601 dentists in 2000. In 2010, the average age of Italian dentists was around 48 years old, and the largest age class (42%) consisted of practitioners aged between 50 and 59 years. An examination of the geographical distribution shows a significant heterogeneity, which contributes to the fragmentation of the supply: The northern regions have the highest proportion of dentists (49.27%), followed by the central regions (21.84%) and then by the southern ones (21.45%); the islands have the lowest proportion of dentists, with 9.42% (FNOMCeO, 2012).

The Italian public health system, Servizio Sanitario Nazionale (SSN), provides free dental care only to marginal segments of the population (people in vulnerable conditions) as well as to children under 14 years of age. However, those services are provided in a different manner in each regional health authority owing to the 1992–1993 health reform, which triggered a process of health regionalisation, and to the 2001 Constitutional Reform, which has continued the process of health decentralisation (Pavolini & Vicarelli, 2012). Because there are no recent data published on the number of dentists working in the SSN, we must rely on the data reported in a 2006 study. According to this source, 3,457 dentists work in the public sector (6.5% of the total); 1,094 dentists are employees of the SSN, 249 dentists have fixed-term contracts, and 2,114 dentists have SSN contracts (Ministero della Salute, 2011). Recent estimates (ANDI, 2013) show that the number of dentists working in the public sector has risen to around 4,000 dentists, representing 8% of the professional register but meeting less than 10% of demand.

Taking into consideration the academic world, the number of academics belonging to the scientific–disciplinary area of odontostomatology (MED/28) in 2015 is 414 academics, of which 186 are researchers, 137 are lecturers, and 91 are full professors. These academics are employed in 37 medical faculties, which offer six-year degree courses in dentistry. Academic staff belonging to the MED/28 area make up 4.4% of all academic staff belonging to medical disciplinary sectors, which are 50 in all. Despite a plurality of trade union and scientific associations, which can be accessed by the medical profession, over 23,000 dentists are members of the ANDI, the main trade union of the sector. The ANDI, which was established in 1946, organizes cultural and scientific activities for its members in addition to being a trade union.

Currently, the Italian dental sector is characterized by the almost exclusively private nature of services. However, this is not an anomaly in Europe, where oral healthcare is mostly provided by private dental practitioners (Paris, Devaux, & Wei, 2010). Therefore, payment for dental treatment accounts for a substantial portion of household medical spending. Around 19% of all out-of-pocket expenditures across OECD countries goes to dental care. In Denmark and Spain, this percentage reaches 30% (OECD, 2013). There are around 40,000 private dental surgeries in Italy, with 71.9% of them run by sole practitioners and 11.5% by partnerships. This confirms the prevalence of the "solo practice" model throughout the country. According to the ANDI (2013), innovation processes, whereby dentists group together to create larger practices, exist; however, this phenomenon has nothing to do with joint stock companies, which form a minority (2.5%). The typical dental surgery has a surface area of about 100 m^2, is equipped with two dental treatment couches, and has two employees and 1.5 assistants. The number of employed staff is also

low because dentists in Italy tend to perform tasks that in other countries may be delegated to other. For example, 80.3% of them perform oral hygiene directly, with no recourse to a specific professional profile (ANDI, 2013). The use of traditional technology has been stable over time, but a growing number of dentists possess more advanced instruments and technologies available in the sector's market. Finally, 73.4% of surgeries involve orthodontics, prosthetics, restorative dentistry, and endodontics.

As in the majority of European countries (del Aguila, Leggott, Robertson, Porterfield, & Felber, 2005; McKay & Quiñonez, 2012; Pallavi & Rajkumar, 2011; Rajeh, Hovey, & Esfandiari, 2014), there is a growing female presence in the dentistry profession in Italy. In 2012, female dentists who enrolled in the professional register represented 24.5% of the total. An examination of the distribution by age cohorts shows an increase since the 49- to 54-year-old cohort (Table 1).

Table 1
Number of dentists by age 2012 (FNOMCeO data processing, 2012)

Age	**Male**		**Female**		**Total**
Between 24 and 29	1126	52.2%	1031	47.8%	2 157
Between 29 and 34	2296	54.2%	1938	45.8%	4 234
Between 34 and 39	3003	59.6%	2036	40.4%	5 039
Between 39 and 44	3025	65.5%	1590	34.5%	4 615
Between 44 e i 49	4601	70.5%	1925	29.5%	6 526
Between 49 and 54	7076	77.2%	2093	22.8%	9 169
Between 54 and 59	11139	82.4%	2379	17.6%	13 518
Between 59 and 64	7255	89.1%	885	10.9%	8 140
Between 64 and 69	2315	92.2%	195	7.8%	2 510
Between 69 and 74	995	92.6%	80	7.4%	1 075
Over 75	1056	95.0%	56	5.0%	1 112
Total	43887	75.5%	14208	24.5%	58 095

This increase in the percentage of female dentists brings Italy closer to those reported in other European countries, which, except for the Netherlands and Switzerland, record substantially higher percentages of female dentists, especially in the countries of eastern Europe (Council of European Chief Dental Officers, 2014) (Table 2).

Table 2
Number of dentists registered and in active practice and percentage of female in European countries 2014 (Council of European Chief Dental Officers, 2014)

Country	**Number of dentists on register**	**Percentage female**	**Number of dentists in active practice**	**Percentage female**
Austria	4841	39	4826	39
Belgium	8900	48	7892	44
Bulgaria	8240	64	8240	64
Cyprus	779	-	753	45
Czech Rep	9158	64	7007	66
Denmark	7533	50	4800	50
Estonia	1555	87	1220	87

Finland	5866	70	4500	68
France	44537	37	40968	37
Germany	88882	42	69236	42
Greece	13919	47	12574	47
Hungary	7105	58	5613	58
Iceland	369	35	273	35
Ireland	2646	41	1990	37
Italy	58065	27	48000	32
Latvia	1457	87	1302	85
Liechtenstein	35	-	35	-
Lithuania	3010	83	3010	84
Luxembourg	363	30	360	30
Malta	190		142	34
Netherlands	12654	26	8827	25
Norway	6176	43	4801	45
Poland	29947	78	21750	75
Portugal	7180	53	6595	55
Romania	16456	64	15395	64
Slovakia	3185	61	3085	61
Slovenia	1664	62	1345	62
Spain	27826	41	23200	41
Sweden	15236	47	7457	50
Switzerland	4500	22	4500	22
UK	38252	42	36500	42

This transformation is still too recent to allow an analysis regarding its possible impact on the dental profession. As yet, there are no broad studies to support the hypothesis of actual change. Research studies on the effects of feminization in medicine, however, have provided differing and controversial evaluations (Kilminster, Downes, Gough, Murdoch-Eaton, & Roberts, 2007; Levinson & Lurie, 2004; Vicarelli, 2008).

An extremely traditional profile seems to emerge in terms of professional practice (individual clinics) and sector of activity (private market); this finds place within an institutional context, which appears to be rather weak owing to the inclusion of both dental training courses in medical faculties and their order within that of physicians.

Dentists and the economic crisis

The slow and difficult professionalization of dentists in Italy seems to have engendered work practices still based on the past rather than being innovatively directed to the future. This situation has worsened since the 2008 economic crisis, the impact of which is still apparent in Italy, producing a marked decrease in access to dental care for a large part of the population and the lower social strata (Ministero della Salute, 2014; Regione Piemonte & National Institute of Statistics (ISTAT), 2014). To understand the effects of the crisis on the dental profession more thoroughly, a survey was conducted among the profession's representatives of the 105 provincial orders in Italy.

The results of the survey indicate strong discontent among Italian dentists. According to the respondents, the most critical issue is the reduction in income resulting from their professional practice. This reduction is linked to three factors: (a) a reduction in the number of patients, (b) a strong increase in competition, and (c) an equally strong increase in the operating costs of professional clinics.

With regard to the first factor, the survey seems to confirm that a decrease in the number of patients has occurred (according to 95% of respondents) since 2008, the year when the economic crisis started (Table 3).

Table 3
Reduction in number of patients

	No		Yes	
Can you confirm the tendency for the number of patients to decrease?	6.15%		93.85%	
What is the reason for this decrease in patients?	Yes	No	Partially	Total
1. The economic crisis and therefore the reduced spending power of patients	95.0%	-	5.0%	100.0%
2. Increased competition in the sector due to the surplus of graduates from Italian universities	51.8%	12.5%	35.7%	100.0%
3. Increased dental tourism	28.3%	39.6%	32.1%	100.0%
4. The excessive number of foreign universities that allow enrolment without an entrance examination	29.4%	37.3%	33.3%	100.0%
5. The difficulties of dentists in responding to the recession promptly and correctly (without jeopardizing the professionalism or quality of treatment)	30.2%	30.2%	39.6%	100.0%

The sector most affected is prosthetics, followed by prevention and basic care. The collapse of the prosthetic industry is related to the high cost of dental implants, and the effectiveness of emergency treatments is connected to the reduction in prevention, which has resulted in an increase in diseases. Rather than a reduction in prevention activities, it seems appropriate to speak of the absence of a policy that promotes oral health. In Italy, oral health has always been considered an individual responsibility and has, therefore, never acquired a public dimension (Di Caccamo & Benedetti, 2009). Moreover, oral prevention is not part of Italian culture. Italians tend to underestimate the severity of their dental conditions and, consequently, do not go to specialists for checkups and prevention (ANDI, 2013).

With regard to the second factor—increased competition—the respondents claimed that it is related to a variety of causes. One cause is the oversupply of graduates from Italian universities, which, despite attempts to limit admission to the program, is still excessive. Moreover, the substantial number of Italian students attending foreign universities that allow registration without any entry barriers aggravates the problem (Table 4).

Table 4
Factors threatening the profession

According to you, what are the factors that today threaten the dentistry sector?	Yes	No	Partially	Total
1. Competition by low-cost clinics/companies operating in Italy	45.0%	10.0%	45.0%	100.0%
2. Competition by low-cost clinics operating abroad (dental tourism)	23.7%	30.5%	45.8%	100.0%
3. Increased costs of surgery management	81.8%	3.0%	15.2%	100.0%
4. The difficulty of updating technology	18.2%	45.5%	36.4%	100.0%
5. Excessively penalizing legislation	72.1%	6.6%	21.3%	100.0%
6. Restricted outsourced service contracts that excessively penalize quality	42.9%	10.7%	46.4%	100.0%
7. Unlawful exercise of the profession	72.1%	3.3%	24.6%	100.0%

Another cause linked to the rise in competition is the increasing number of low-cost clinics, in particular the penetration of the domestic market by multinational franchises providing low-cost dental treatment. This link is confirmed by a 2012 survey by the ANDI, which found that 82.6% of dentists believe that this organizational setup, as opposed to the free professional model, negatively affects the profession (ANDI, 2013). The still rather widespread practice of dental tourism also contributes to the rise in competition. The outflow of patients began in the 1970s, mainly to the Netherlands where it was possible to receive prosthetic treatment in a few days. Since then, the phenomenon has grown, and numerous satellite activities have sprung up around it. In recent years, specialized tour operators have even begun to organize "tooth journeys." However, dental tourism seems to be currently in decline owing to the closer attention paid by patients to the quality of services and the safety of treatments (Bambara, 2013). The respondents also identified the growing illicit market as a problem. According to an estimation by FNOMCeO, there are around 15,000 dentists practicing without being qualified to do so. This number may be underestimated, given that from 2006 to 2009, 2,042 bogus dentists were reported, for a turnover estimated at 720 million euros per year paid off the books (Marrone, 2010). In 2009 alone, the Food and Health Anti-Fraud Unit, Nucleo Antisofisticazione e Sanità (NAS), charged 1,170 people with unlawful exercise of the medical profession; 450 of them were bogus dentists (Bocci, 2010). The CAO presidents have recently proposed the confiscation of property from unlawful clinics, which would thus be punished not only legally under criminal and administrative law but also economically.

Finally, according to the dentists who participated in the survey, the rising costs of professional clinics represent the third critical factor. The costs of rent, electricity, water and gas, and materials have increased, as well as the level of taxation. The recent increase of one percentage point in the value added tax has raised the cost of products and equipment by approximately 7.3 million euros. This rise in expenditure should be considered jointly with the reduction of earnings owing to the decrease in patients. An ANDI survey conducted in 2012 found that 41% of dentists declared their turnover in 2011 to be lower than it was in 2010, and 58.2% reported a similar decline between 2011 and 2012. The survey also showed that this decline was often attributed to a decrease in the fees charged by dentists in an attempt to attract more clients.

In summary, it is clear that Italian dentists have been deeply affected by the 2008 economic crisis, which has led to a reduction in income. This reduction is linked to a decrease in the number of patients and to increases in both competition and the operating costs of clinics. Consequently, dentists appear to be experiencing governance challenges.

Conclusions and future perspectives

The historical and empirical data reported in previous sections of this study allow us to draw some conclusions about the current situation in Italian dentistry, which can be summarized as follows.

1. The professionalization of dentists in Italy has been a slow and difficult process because it has been led largely by the medical profession, which has endeavored to increase its market and remuneration amid the fragility of the healthcare market and weaknesses of the public welfare system. Indeed, the Italian state has intervened in dental care as little as possible so as to minimize any financial costs, and it has transposed as

late as possible European legislation on the recognition of a professional figure independent from that of a doctor. The Italian population has passively accepted this situation because it has been able to access low-cost dental care offered by a large number of unlicensed dentists (technicians or unqualified practitioners).

2. The profession today appears to have a strong male presence, even though the process of feminization has begun. In addition, the profession exhibits traditional features that are connected to both the prevalent professional model (that of small clinics) and its almost exclusive existence in the private sector. Furthermore, the profession is still largely regulated by doctors and by their powerful professional orders because an autonomous order does not exist in dentistry. Indeed, in accordance with Law No. 409, the Order of Physicians and Dentists was established, and training courses for dentists were created within medical faculties. In addition, professional ethics seem fragile when considered in terms of not only professional misconduct, but also the large amount of unlawful practitioners that the category is unable to eliminate. The service orientation of the Italian dental profession appears to be absent.
3. The recent economic crisis has reduced the number of users of dental clinics, with a consequent decline in their profits. The profession's structural weakness, in terms of its difficulties with self-regulation, has prevented it from countering unlawful practices, which have increased, and from supporting a process of reorganization. Therefore, the profession has not overcome the excessive fragmentation of the supply and the prevalence of organizational models (solo practice), which do not allow the exploitation of economies of scale and new management tools. Finally, it has been unable to exert pressure on the state to increase employment opportunities within the public sector.

Given this situation, it is not pointless to ask whether—and, if so, what type of—professionalism exists in dentistry in Italy today, as well as what logic predominates within it (Masella, 2007; Mathewson & Rudkin, 2008; Welie, 2004).

Harris and Holt (2013) have recently suggested the coexistence of four distinct but integrated logics in the English dental profession: ownership responsibilities, professionalism, population health managerialism, and entrepreneurial commercialism. Ownership responsibilities are characterized by the following principles: the assumption of authority and managerial responsibility for practice staff, the upholding of a positive reputation, and the provision of services to patients and the community. Professionalism is characterized by clinical excellence, altruism, pursuit of patients' best interests, patient advocacy, technical knowledge, professional responsibility, and self-governance. Population health managerialism has the tracking and explanation of public expenditures and the pursuit of good governance as its basic principles. Entrepreneurial commercialism is based on trading and the capitalization of opportunities, with a focus on sustaining and developing a profitable business. In light of these distinctions, one may presume that the logics of ownership responsibilities and professionalism prevail in the Italian case, albeit in a weak form; population health managerialism appears to be almost nonexistent; and entrepreneurial commercialism has minimal influence. This means that Italian dentists continue to combine professional and commercial logics with little regard to the public dimension and to adhere to more overt managerial principles.

However, it is possible that numerous factors will make it even more difficult in the future to balance the professional and commercial logics. As Ozar (2012) has recently noted, several challenges exist. These include the increased availability of unregulated oral health information to the public, the increased amount of healthcare advertising in many societies, and the growth of esthetic dentistry that

differs from standard oral healthcare in important and ethically significant ways. It is true, however, that the Association for Dental Education in Europe regards professionalism as a competence required to practice dentistry (Cowpe, Plasschaert, Harzer, Vinkka-Puhakka, & Walmsley, 2010), and, thus, it implies that it should be an essential component of the dental school curriculum and of continuing professional development (CPD) (Fricker, Kiley, Townsend, & Trevitt, 2011). Hence, professionalism should continue to be the basis of the profession, despite growing commercial pressures (Zijlstra-Shaw, Robinson, & Roberts, 2012).

Over the past 40 years, the proportion of women in dentistry has been rising steadily, raising questions about the effects of this feminization on the profession. A review of the literature, although limited, highlights potentially important areas related to gender, including its effects on work hours, practice models, professional incomes, the dentist–patient relationship, clinical philosophies, specialty practice, academia, and leadership (Adams, 2000, 2005; Ayers, Thomson, Rich, & Newton, 2008; McKay & Quiñonez, 2012; Murray, 2002). Because cohorts of female dentists are only beginning to enter the workforce in Italy, it is difficult to predict the long-term effects (Spina & Vicarelli, 2012). However, the profession may shift toward a less entrepreneurial logic and place greater attention on its ethical dimension.

What does the future hold for Italian dentists? What strategies will they adopt to deal with the crisis that is currently afflicting them? In other words, will they continue with the well-tried strategy based on the solo practice model, as well as to ignore the work performed by unlicensed dentists, thus maintaining the profession's traditional status? Or will they decide to construct new organizational forms (cooperatives, large group practices) and new collective financing agencies (mutual insurance companies), thereby addressing the issues associated with the hierarchization of work and the new professionalism? Will they thus decide to enhance the logic of population health managerialism by accepting greater integration with the SSN and the duty to protect less advantaged social groups?

Today, the situation is fluid, and the ways ahead are many. Monitoring the processes experienced by the dental profession in Italy as it navigates this current transition phase is important, because doing so will shed light on its choices and the consequences of these choices.

References

Adams, T .L. (1999). Dentistry and medical dominance. *Social Science & Medicine, 48*(3), 407-420. http://dx.doi.org/10.1016/S0277-9536(98)00316-5

Adams, T. L (2000). *A dentist and a gentleman: gender and the rise of dentistry in Ontario*. Toronto: University of Toronto Press.

Adams, T. L. (2005). Feminization of professions: the case of women in dentistry. *Canadian Journal of Sociology*, *30*(1), 71-94. http://dx.doi.org/10.2307/4146158

Aguila, M. A. del, Leggott, P. J., Robertson, P. B., Porterfield, D. L., & Felber, G. D. (2005). Practice pattern among male and female general dentists in a Washington state population. *American Dental Association*, *136*(6), 796-790. http://dx.doi.org/10.14219/jada.archive.2005.0265

National Association of Italian Dentists (ANDI) (2013). *Rapporto. 61 congresso scientifico nazionale ANDI* [Report 61st national scientific congress ANDI]. Roma, 15-16 Novembre 2013.

Ayers, K. M., Thomson, W. M., Rich, A. M., & Newton, J. T. (2008). Gender differences in dentists' working practices and job satisfaction. *Journal of Dentistry*, *36*(5), 343-350. http://dx.doi.org/10.1016/j.jdent.2008.01.012

Bambara, F. (2013).Turismo odontoiatrico. Il problema sta a monte [Dental turism. The problem is upstream]. *Senzaetà*, *56*, 26-27.

Bocci, M. (2010). L'esercito dei falsi medici che cura i malati veri. [The army of fake doctors that care for sick people]. *La Repubblica*, 20 maggio 2010. Retrieved from: http://www.repubblica.it/cronaca/2010/05/28/news/l_esercito_dei_falsi_medici-4393342/

Burrage, M., Jarausch, K. H., & Siegrist, H. (1990). An actor-based framework for the study of the professions. In M. Burrage & R. Torstendahl (Eds.), *Professions in theory and history: rethinking the study of the professions* (pp. 203-225). London: Sage.

Collins, R. (1990). Changing conceptions in the sociology of the professions. In R. Torstendahl, & M. Burrage (Eds.), *The formation of professions* (pp. 11–23). London: Sage.

Corradini, M., & Zampetti P. (2010). *Il dentista italiano.* [The Italian dentist]. Trento: UCT.

Council of European Chief Dental Officers (CECDO). (2014). CECDO database. Retrieved from: http://www.cecdo.org/pages/database%20intro.html

Cowpe, J., Plasschaert, A., Harzer, W., Vinkka-Puhakka, H., & Walmsley A. D. (2010). Profile and competences for the graduating European dentist – update 2010. *European Journal of Dental Education*, *14*, 193–202. http://dx.doi.org/10.1111/j.1600-0579.2009.00609.x

Crall, J. (2006). Access to oral health care: professional and societal considerations. *Journal of Dental Education, 70*(11), 1133-1138.

Dent, M., & Whitehead, S. (2001). *Managing professional identities: knowledge, performativity and the "new" professionalism.* London: Routledge. http://dx.doi.org/10.4324/9780203467091

Di Caccamo, P., & Benedetti, G. (2009). Salute orale: una priorità dimenticata [Oral health: a neglected priority]. *Salute internazionale*, 10 settembre 2009. Retrieved from: http://www.saluteinternazionale.info/2009/09/la-salute-orale-una-priorita-dimenticata/

Enthoven, A. (1988). *Theory and practice of managed competition in health care finance*. Amsterdam: North Holland.

Evans, C. A. (2006). Eliminating oral health disparities: ethics workshop reactor comments. *Journal of Dental Education, 70*(11), 1180-1183.

Evetts, J. (2012). *Professionalism in turbulent times: changes, challenges and opportunities***.** Presented at Propel International Conference Stirling, 9-11 May 2012.

Exley, C. (2009). Bridging a gap: the (lack of a) sociology of oral health and healthcare, *Sociology of Health & Illness*, *31*(7), 1093–1108. http://dx.doi.org/10.1111/j.1467-9566.2009.01173.x

FNOMCeO. Federazione Nazionale degli Ordini dei Medici Chirurghi e degli Odontoiatri. (2012). *Medici e odontoiatri iscritti all'Ordine ad Aprile 2012* [Doctors and dentists enrolled with the Order at April 2012]. Roma: Centro Studi.

Freidson, E. (1971). Professionalism—the doctor's dilemma. *Social Policy, 1,* 35-40.

Fricker, J. P., Kiley, M., Townsend, G., & Trevitt, C. (2011). Professionalism: what is it, why should we have it and how can we achieve it? *Australian Dental Journal*, *56*(1), 92–96. http://dx.doi.org/10.1111/j.1834-7819.2010.01306.x

Garetto, L. P., & Yoder, K. M. (2006). Basic oral health needs: A professional priority? *Journal of Dental Education, 70*(11), 1166-69.

Graham, R. (2006). Lacking compassion - sociological analyses of the medical profession. *Social Theory & Health*, *4,* 43–63. http://dx.doi.org/10.1057/palgrave.sth.8700063

Harris, R., & Holt, R. (2013). Interacting institutional logics in general dental practice. *Social Science & Medicine*, *94*, 63-70. http://dx.doi.org/10.1016/j.socscimed.2013.05.038

Jarausch, K. H. (1990). The german professions in history and theory. In G. Cocks & K. H. Jarausch (Eds.), *German professionals, 1800-1950* (pp. 9-24). New York: Oxford University Press.

Kilminster, S., Downes, J., Gough, B., Murdoch-Eaton, D. & Roberts, T. (2007). Women in medicine – is there a problem? A literature review of the changing gender composition, structures and occupational culture in medicine. *Medical Education*, *41*(1), 39-49. http://dx.doi.org/10.1111/j.1365-2929.2006.02645.x

Kuhlmann, E. (2003). Gender differences, gender hierarchies and professions: an embedded approach to the german dental profession. *International Journal of Sociology and Social Policy*, *(23)*4/5, 80-96. http://dx.doi.org/10.1108/01443330310790525

Larkin, G. V. (1980). Professionalism, dentistry and public health. *Social Science & Medicine, 14*(3), 223-229. http://dx.doi.org/10.1016/0160-7979(80)90087-9

Larson Sarfatti, M. (1977). *The rise of professionalism.* Berkeley: University of California Press.

Levinson, W. & Lurie, N. (2004). When most doctors are women: what lies ahead? *Annals of Internal Medicine*, *141*(6), 471-474. http://dx.doi.org/10.7326/0003-4819-141-6-200409210-00013

Marrone, M. (2010). L'esperto risponde [The expert answers]. *Prospettiva Odontoiatrica, 2*, 11.

Masella, R. S. (2007). Renewing professionalism in dental education: overcoming the market environment. *Journal of Dental Education, 71*, 205–216.

Mathewson, H., & Rudkin, D. (2008). The GDC-Lifting the lid. Part 1: Professionalism and standards. *British Dental Journal*, *204*(10), 571-574. http://dx.doi.org/10.1038/sj.bdj.2008.410

McKay, J. C., & Quiñonez, C. R. (2012). The feminization of dentistry: Implications for the profession. *Journal of the Canadian Dental Association*, *78*, c1.

Ministero della salute. (2011). Odontoiatria di comunità:criteri di appropriatezza clinica, tecnologica e strutturale [Community dentistry: criteria of clinical, technological and structural appropriateness]. *Quaderni del Ministero della Salute, 7,* 1-244.

Ministero della salute. (2014). *Relazione sullo stato sanitario del paese 2012-2013.* [Report on the health status of the country 2012-2013]. Retrieved from: http://www.rssp.salute.gov.it/imgs/C_17_pubblicazioni_2258_allegato.pdf

Moffatt, F., Martin, P., & Timmons, S. (2014). Constructing notions of healthcare productivity: the call for a new professionalism? *Sociology of Health & Illness*, *36*(5), 686–702. http://dx.doi.org/10.1111/1467-9566.12093

Murray, J. J. (2002). Better opportunities for women dentists: a review of the contribution of women dentists to the workforce. *British Dental Journal, 192*(4), 191-6. http://dx.doi.org/10.1038/sj.bdj.4801333

Muzio, D., & Kirkpatrick, I. (2011). Introduction: Professions and organizations—a conceptual framework. *Current sociology, 59*(4), 389-405.

Muzio, D., Ackroyd, S., & Chanlat, J. F. (Eds.). (2007). *Redirections in the study of expert labour: established professions and new expert occupations*. Basingstoke: Palgrave. http://dx.doi.org/10.1057/9780230592827

Nettleton, S. (1992). *Power, pain and dentistry*. Buckingham: Open University Press.

Noordegraaf, M. (2007). From "pure" to "hybrid" professionalism. Present day professionalism in ambiguous public domains. *Administration & Society*, *39*(6), 761-781. http://dx.doi.org/10.1177/0095399707304434

O'Shea, R. M. (1971). Dentistry as an organization and institution. *The Milbank Memorial Fund Quarterly, 49*(3), 13-28. http://dx.doi.org/10.2307/3349416

Organisation of Economic Co-operation and Development (OECD) (2013). *Health at a Glance 2013: OECD Indicators*, Paris: OECD Publishing.

Orzack, L. (1981). New profession by Fiat: Italian dentistry and the European Common Market. *Social Science & Medecine*, *18*(6), 807-816. http://dx.doi.org/10.1016/0271-7123(81)90025-0

Ouchi, W. G. (1980). Markets, bureaucracies, and clans. *Administrative Science Quarterly*, *25*(1), 129-141. http://dx.doi.org/10.2307/2392231

Ozar, D. T. (2006). Ethics, access, and care. *Journal of Dental Education, 70*(11), 1139-1145.

Ozar, D. T. (2012). Professionalism: challenges for dentistry in the future. *Journal of Forensic Odonto Stomatology, 30*(1), s72-s84.

Pallavi, S. K., & Rajkumar, G. C. (2011). Professional practice among woman dentist. *Journal of International Society of Preventive & Community Dentistry*, *1*, 14-9. http://dx.doi.org/10.4103/2231-0762.86376

Paris, V., Devaux, M., & Wei, L. (2010). *Health Systems Institutional Characteristics: A Survey of 29 OECD Countries*. *OECD Health Working Papers,* No. 50. Paris: OECD Publishing. http://dx.doi.org/10.1787/5kmfxfq9qbnr-en

Pavolini, E., & Vicarelli, G. (2012). Is decentralization good for your health? Transformations in the Italian NHS. *Current Sociology, 60*(4), 472-488. http://dx.doi.org/10.1177/0011392112438332

Radcliffe, J., & Dent, M. (2005). Introduction: from New Public Management to the new governance? *Policy & Politics, 33*(4), 617-622. http://dx.doi.org/10.1332/030557305774329172

Rajeh, M., Hovey, R., & Esfandiari, S. (2014). An inquiry into female dentists' professional lives and concerns. *Open Journal of Social Sciences*, *2,* 121-129. http://dx.doi.org/10.4236/jss.2014.28018

Regione Piemonte & National Institute of Statistics (ISTAT) (2014). *Tutela della salute e accesso alle cure. Anno 2013.* [Health protection and access to care. Year 2013]. Retrieved from: http://www.sossanita.it/doc/2014_07_10_ISTAT_tutelaSALUTE.pdf

Richards, N. D. (1971). Dentistry in Great Britain: some sociologic perspectives. *The Milbank Quarterly, 49*(3), 133-169. http://dx.doi.org/10.2307/3349421

Rigal, E., & Michau, J. (2007). *Le métier de chirurgien dentiste: caractéristiques actuelles et evolutions. Une étude qualitative* [The dental surgeon: current traits and its evolution. A qualitative study]. Paris: Ministère de la santé de la jeunesse et des sports.

Saks, M. (2012). Defining a profession: the role of knowledge and expertise. *Professions & Professionalism, 2*(1), 1-10. http://dx.doi.org/10.7577/pp.v2i1.151

Saltman, R. B., Bankauskaite, V., & Vrangbaek, K. (2007). *Decentralization in health care*. European observatory on health systems and policies series. London: Open University Press/McGraw-Hill Education.

Siegrist, H. (1990). Professionalization as a process: patterns, progression and discontinuity. In M. Burrage & R. Torstendahl (Eds.), *Professions in theory and history: rethinking the study of the professions* (pp. 177–202). London: Sage.

Speed, E., & Gabe, J. (2013). The health and social care act for England 2012: The extension of"new professionalism". *Critical Social Policy*, *33*(3), 564-574. http://dx.doi.org/10.1177/0261018313479010

Speranza, L. (1992). L'impatto della nuova Europa sulle professioni: sindrome del "grande fratello" e sociologia dell'azione. [The impact of the new Europe on the profession: the big brother syndrome and the sociology of action], *Sociologia del lavoro*, *47/48*, 135-151.

Speranza, L., Tousijn, W., & Vicarelli, G. (2008). *I medici in Italia, motivazioni, autonomia, appartenenza*. [The medical profession in Italy, motivations, autonomy, sense of belonging]. Bologna: Il Mulino.

Spina, E., & Vicarelli, G. (2012). *A new generation of female physicians. What are the gender implications in healthcare managerialized organizations*? Report presented at RC52-ISA Professional Groups Interim Congress, Ipswich, 11-12 November 2012.

Starr, P. (1982). *The social transformation of American medicine*. New York, NY: Basic Books.

Svensson, L. G. (2006). New professionalism, trust and competence: some conceptual remarks and empirical data. *Current Sociology*, *54*(4), 579-593.

Thorogood, N. (2002). Regulating dentistry. In J. Allsop, M. Saks (Eds.), *Regulating the health professions* (pp. 108-120). London: Sage.

Torstendahl, R. (1990). Essential properties, strategic aims and historical development: three approaches to theories of professionalisms. In M. Burrage & R. Torstendahl (Eds.), *Professions in theory and history: rethinking the study of the professions* (pp. 44-61). London: Sage.

Tousijn, W. (2000). *Il sistema delle occupazioni sanitarie.* [The system of health professions]. Bologna: Il Mulino.

Vicarelli, G. (2005). Control, competition and cooperation in European health systems: points of contact between health policy and industrial policy. In M. Di Tommaso & S. Schweitzer (Eds.), *Health Policy and High-Tech Industrial Development* (pp. 59-76). Cheltenham Glos: Edward Elgar Publisher.

Vicarelli, G. (2008). *Donne di medicina. Il percorso professionale delle donne medico in Italia.* [Women of medicine. The professional pathway of female doctors in Italy]. Bologna: Il Mulino.

Vicarelli, G. (2010). *Gli eredi di Esculapio. Medici e politiche sanitarie nell'Italia unita.* [The heirs of Esculapio. Doctors and health policies after the unification

of Italy]. Roma: Carocci.

Vicarelli, G. (2015). Healthcare: difficult paths of reform. In U. Ascoli & E. Pavolini (Eds.), *The Italian welfare state in a European perspective* (pp. 157-178). Bristol: Policy Press.

Vidal, F. (2008). *Regards sur l'histoire de l'art dentaire, de l'époque romaine à nos jours.* [A look at the history of dentistry, from the roman period to today]. Retrieved from: http://www.academiedentaire.fr/attachments/0000/0095/CH_VIDAL.pdf

Welie, J. V. M. (2004). Is dentistry a profession? Part 3: future challenges. *Journal of the Canadian Dental Association*, *70*, 675-8.

Williamson, O.E. (1975). *Markets and hierarchies: analysis and antitrust implications.* New York: Free Press.

Willis, E. (1983). *Medical dominance: the division of labour in Australian health care*. Sydney: Allen & Unwin.

Zijlstra-Shaw, S., Robinson, P. G., & Roberts, T. (2012). Assessing professionalism within dental education; the need for a definition. *European Journal of Dental Education*, *16*(1), e128-e136. http://dx.doi.org/10.1111/j.1600-0579.2011.00687.x