



Republic of Mozambique
Ministry of Health
Human Resources Directorate



Human Resources
for Health
Observatory of
Mozambique



Focus on
The Dentists

**On the occasion of
the International
Dentist's Day**





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On October 3rd it is celebrated the International Dentist Day, which was chosen since it coincides with the day of the foundation of the first dental school in the world, the Baltimore College of Dental Surgery, in 1840, in the United States of America.

On the occasion of this date we spoke with Dra. Marta Mapengo Domingo, Chief of the National Programme of oral health, dentist, with a master degree in public health.

Some Concepts

Odontology or dental medicine

is the human health area that studies and treats the stomatognathic system. It involves the face, neck, and the oral cavity, covering the bones, masticatory muscles, joints, teeth and tissues.

By oral health we understand the absence of stomatological disease, as well as the correct function, stability and even aesthetics of all stomatognathic system. It is known that the oral health has serious implications in the human health, being both inseparable.

The technicians working in the Odontology area in the National Health Service are designated as Odontostomatology Technicians (higher and medium level) Odontostomatology Agents (basic level) and Odontostomatology Assistants (elementary level).

What is the role of the dentist?

- a) To perform a diagnostic in order to obtain the epidemiological profile for the oral health planning and programming; (this means that the dentist needs to know the population that is treating and its needs).
- b) To perform clinical procedures, including the urgent assistance and minor outpatient surgeries; (as much as possible taking into consideration the resources that they have).
- c) To perform comprehensive oral health (health promotion and protection, damages prevention, diagnosis, treatment, health

rehabilitation and maintenance) individual and collective, to individuals and to specific groups (going to schools in the coverage area to organize chat groups with the community).

- d) When necessary, refer and advise patients to other levels of care, maintaining the responsibility for the monitoring and follow-up of the treatment;
- e) To monitor, support and develop activities related to oral health on a multidisciplinary basis. (example: pregnant women, hypertensive or diabetic patients, always integrating interventions).



What is the status of the training of professionals in the Odontostomatology area in Mozambique?

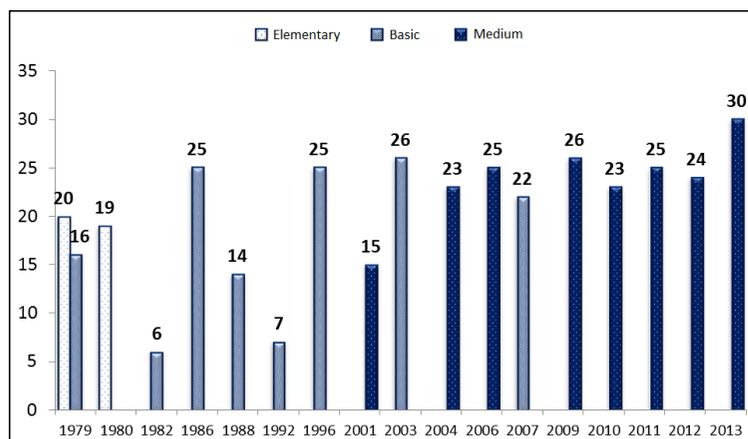
The training of professionals in the Odontostomatology area, at the medium and basic levels, is responsibility of the Ministry of Health.

Between 1979 and 2012, the MoH (MISAU) has graduated approximately 341 students in the Odontostomatology area through the Maputo Health Science

Institute until 1998; from 1992 onward, the Beira Health Science Institute began also the training of staff. Meanwhile, during this period the graduation did not happen every year, having been, on average, graduated 20 students per year, in 17 years.

Until 2000, only professionals of the basic and elementary levels were graduated. The last graduation regarding staff of the elementary level was in 1980. Since 2001, the training of the medium level staff became the priority (see table 1).

Table 1: Number of graduates in the Odontostomatology area by level, 1979-2013



Source: MISAU/DRH/Statistics from 36 years of Training in the Training Institutes of MISAU

This year began the training of Odontostomatology Technicians in **Nampula** and it is planned to expand this training in the next biennium to the **Quelimane and Maputo** Health Science Institutes. One of the constraints is the existence of a specialized technical laboratory for the training in this area in the above mentioned Institutions. The students of the Nampula HSI are using the Unilúrio University Laboratory. Currently,

only the Beira HSI has the cited laboratory. So far, the only medical specialty taught in Mozambique is: the oro-maxilla/facial Surgery, which is the specialty of the dental medicine that treats surgically the politrauma and malformations of facial bones, diseases of the oral cavity and structures attached to it, restoring functionality and aesthetics of structures that may have been affected by cuts, fractures or lacerations, such as mouth,

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tongue, lips, eyes, teeth and maxillary bones.

More recently Mozambique has 3 dental medicine faculties:

- 1 Private Institution: the ISCTEM in Maputo
- 2 Public Institutions: the Unilurio in Nampula and the Unizambeze in Tete,

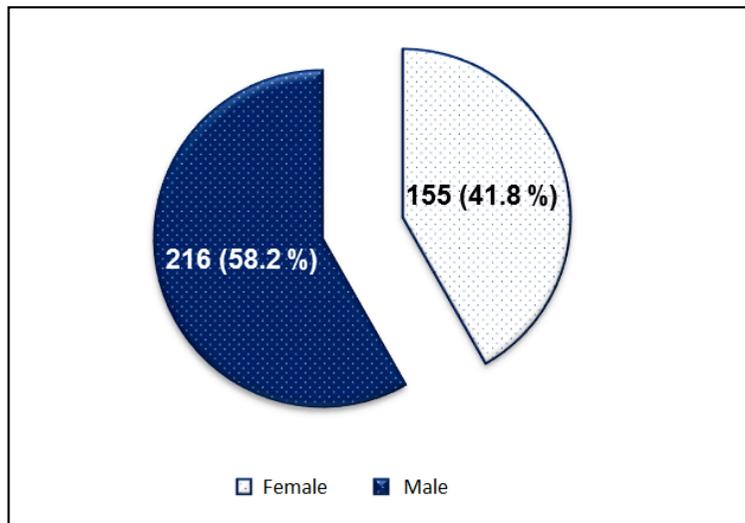
What is the current status of the Odontostomatology area?

In terms of human resources in the National Health Service, Mozambique has been registering a significant increase in the last 11 years, since it began to train technicians in the odontostomatology area, having about 376 oral health professionals, varying from agents to specialists.

This number represents approximately 1,86% of the staff in the special health system regimen. Those people were working in the National Health Service until 31-12-2012, without discriminating the nationality.

Out of the 376 professionals in this area, approximately 38% (143) are female and the remaining 62% (233) are male, as per Table 2 below.

Graph 2: Distribution of staff of the Odontostomatology area of the national health service by gender until 31-12-2013



Source: MISAU/DRH/SIP

Around 36,7%% of the staff of this area has higher level education, 39,6% medium level, and 22,4% basic level. The higher level professionals of the Odontostomatology area, who, in the

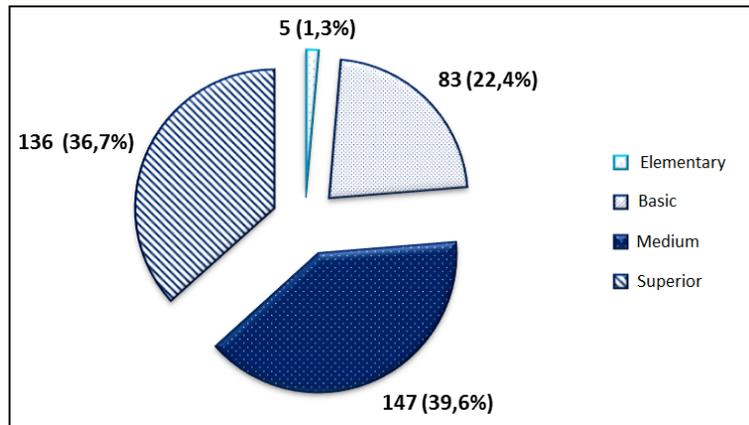
recently adopted Medical Regulation, are called Dentists, are mostly women, while in the medium and basic levels the opposite occurs.(See table 3 and 4)





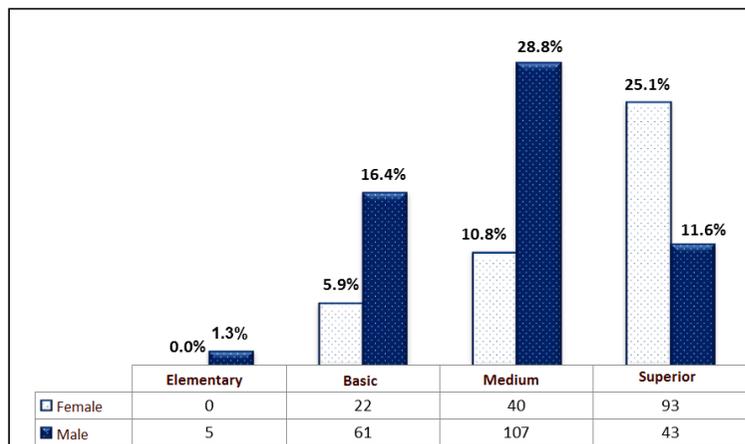
Photo courtesy of Dra. Custódia

Table 3: Distribution of staff of the Odontostomatology area in the national health service until 31-12-2013



Source: MISAU/DRH/ SIP

Table 4: Distribution of staff of the Odontostomatology area in the national health service by level and gender, until 31-12-2013



Source: MISAU/DRH/ SIP

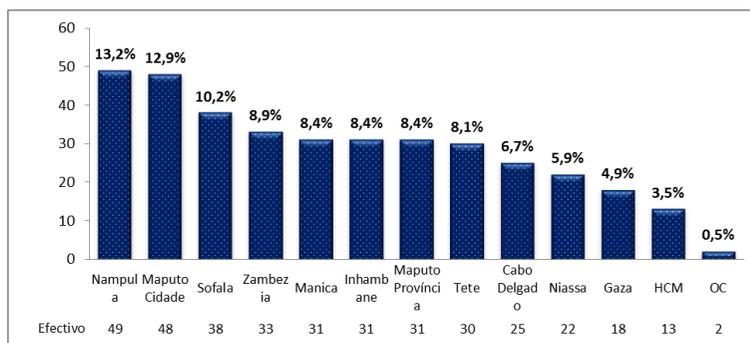


Territorial Distribution of the Technicians of the odontostomatology area

Nampula is the province that holds most of the professionals in this area, with around 13,2% of the 371,

followed by Maputo City (12,9 %), and Sofala (10,2%). Maputo Central Hospital had until 31-12-2013 3,5% (13) of the professionals in the Odontostomatology area. (See Table 5 below)

Table 5: Distribution of staff of the Odontostomatology area in the National Health Service by province until 31-12-2013



Evolution of the number of professionals in the Odontostomatology area

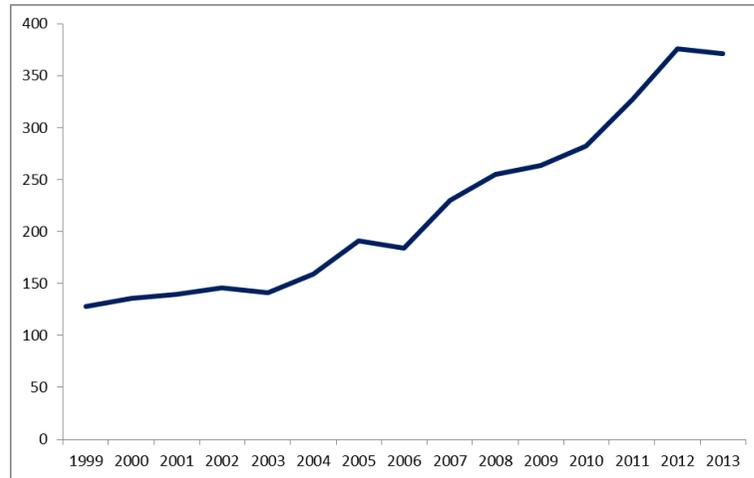
The period from 1999 to 2002 was characterized by an increase of

about 194% of professionals of the Odontostomatology area.

Table 6 below, shows in detail what happened during the period under analysis.



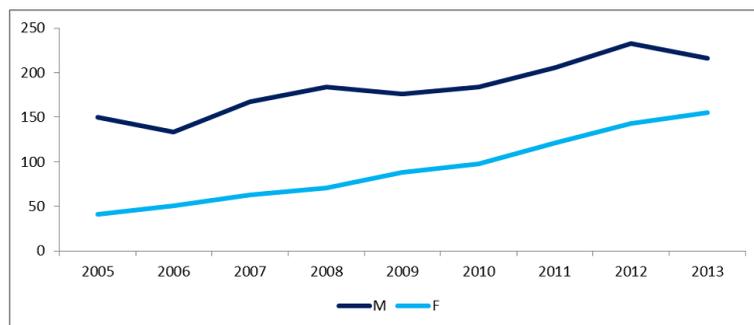
Table 6: Evolution of staff of the Odontostomatology area in the National Health Service from 1999 to 2013



Source: MISAU/DRH/ SIP

From 2005 to 2013 (in 8 years), the number of women grew by 278% (from 41 to 155) while the number of men grew by 44% (from 150 to 216). (see table 7)

Table 7: Evolution of staff of the Odontostomatology area in the National Health Service by gender from 2005 to 2013



Source: MISAU/DRH/ SIP

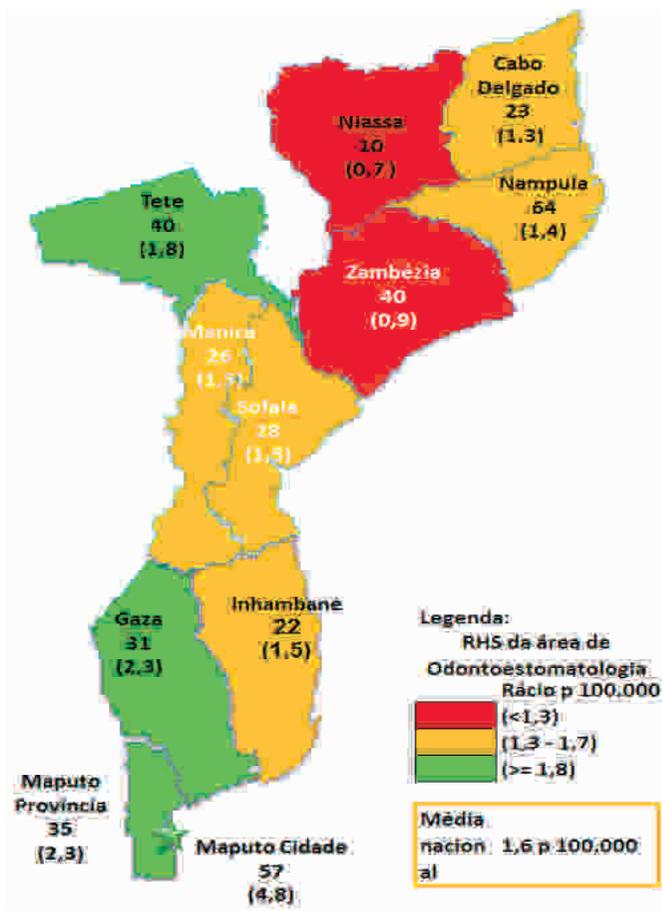
Ratios of human resources density in the Odontostomaology area by population

The national average is 1.5 Odontostomatology technicians per 100.000 inhabitants. The provinces of Maputo City (5.0), Inhambane (2.1%), Maputo Province (2.0), Sofala (1.9%) and Manica (1.7%) present the ratio of the

professionals in the Odontostomatology area per 100.000 Inhabitants above the national average.

The provinces of Niassa (1.4) and Cabo Delgado (1.4) present the ratio of the professionals in the Odontostomatology area per 100.000 Inhabitants around the national average. The other provinces present the ratios below the national average. (see Map 1).

Map 1: Ratio of staff of the Odontostomatology area in the National Health Service per 100 000 inhabitants until 3112-2012 Source: MISAU/DRH/ DPG





What are the challenges that the oral health sector is facing?

- **Organization of the oral health services throughout the country:** ensuring that these services are performed, fulfilling our social function, which is to provide care to everyone, without privileges, without discrimination. We have coverage of 98% of the Stomatology Services nationwide, which means that there is at least one Oral Health Service in each district, with the exception of 2 districts of Cabo Delgado: Ibo, and Nangade; 3 of Nampula: Lalaua, Mongincual, and Mussoril, and 3 of Niassa: Mecula, Nipepe and Muembe. By the end of 2014, we believe we will cover these districts.
- **Lack of material and staff for the promotion and prevention of oral diseases in the community:** at the moment what the hospitals consider are the emergencies, i.e. the dental extractions to relief the pain, due to lack of material for dental treatment; therefore, the second challenge is to increase the promotion and prevention of oral diseases area in the community, reaching schools, children`s centers, shelters for elderly and various institutions, in order to reduce the prevalence of oral diseases in the country. For this purpose it is necessary to train oral Hygienists, whose role is to act in the promotion and prevention

of oral diseases» - explained Dra. Marta Mapengo Domingos. Meanwhile. There is the Preventive Medicine Technician, whose training programme includes prevention and promotion of oral health activities. His role in this area should be strengthened - according to DRH.

- **Inclusion of the oral health component in the curriculum of the Multipurpose Elementary Agent (MEA):** this is the professional that maintains the communication related to the reality faced by a certain location through the valorization of the family and the community. These educators deliver promotion actions, protection and education in heath, fulfilling the role of not only multipliers but also a link between the community and the health. It is precisely for this reason that MISAU, in partnership with the MINED, two years ago, invested in a programme for the promotion of oral health to benefit children between the ages of 6 to 12 years in primary schools. It is necessary to give them education about the brushing technique and about which are the necessary means: a toothbrush every four months, toothpaste with fluoride for the enamel remineralization, a dental floss, are enough materials to do a daily adequate oral hygiene, at low cost. In addition to children, teachers and educators are also trained.





- Brushing teeth 3 times a day (when you wake up, after meals, always carry with you a toothbrush and dental floss in case you have lunch at the workplace).

Some practical advices for a good oral health

- **Brush teeth before going to sleep.** Since at night is the period when we have less salivary flow, we do not move the tongue, therefore the accumulation of alimentary remains which forms the bacterial plaque will be much longer adhering to the teeth. Due to this, the effect of producing acids is bigger, being also bigger its harmful effects;
- **To avoid the excessive consumption of sweetened products, sweets** in children, etc;

- The major keys for having a good oral hygiene are: brush teeth with a **brush or mulala** and fluoride toothpaste, three times a day and use dental floss, at least once a day, preferably at night;
- **Consult the dentist every six months,** with the aim to keep hygiene and to check any lesion of the Dental Caries Disease, as well as any gingival inflammation, which at an early stage it is called Gingivitis, but which later, in a more advanced stage, is called Periodontitis; this means that besides the gingival inflammation, there is reabsorption of the bone that supports the teeth and also the ligament involving the teeth, causing them to fall.





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2. Ministry of Health, Human Resources Directorate - HRD, «Statistics of 36 years of Training in the Training Institutions of the Ministry of Health 1975-2010», 2011

Interview provided by Dr^a Marta Mapengo Domingos (Chief of the National Programme of Oral health, dentist, with a master in public health)

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