Oral health under an integrality perspective*

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Mariângela Matos: Our idea was initially to establish a discussion between lecturers in the first half of the panel discussion to address lingering doubts and promote interaction. Then in the second part participants from the audience will have the opportunity to pose questions to the panelists.

Sônia Chaves: In terms of the epidemiology of dental caries in Brazil, how will the epidemiological parameters change over the next thirty years, in ways not yet observed in the age range of elderly individuals?

Paulo Frazão: Here at the ABOPREV symposia, this closing segment is always eagerly awaited, because it allows us to establish dialogues between the different perspectives presented in the first days of the event. It is necessary to analyze how this transition is occurring between Brazilians. This transition does not present the same characteristics as those observed in industrialized countries, which we can consider a transition of dental caries and not an epidemiological transition. One of the oldest sets of records on dental caries is from a Swedish city. As time passes, if ten years ago the mean DMFT index was 24 teeth affected by caries at 60 years of age, in ten years these 24 teeth affected by caries will be observed at the age of 70 years. There is a statistical phenomenon, which allows us to predict the future based on information available at younger ages.

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Jaime Cury: I would like to comment on this analysis that oral health and particularly the dental caries scenario have not changed in the adult population in recent years. The result is obvious. An individual currently aged 60 years was born in 1950, another aged 50 years was born in 1960 and another who is 20 years old was born in 1990. Brazil started to change in the 1990s, which I call the 90s factor, because this was not achieved by any political party, but rather by the democratization of the country. We shall only be able to observe changes in Brazil in individuals born after 1990. All changes are being observed in the young population, which has benefited from changes occurring in the country. The others suffered the consequences of bad policies. This is the political and social reality of the country, which is reflected in people's mouths.

Sônia Chaves: Paulo Frazão raised several questions, as observed in Europe in relation to adults, and whose mistakes we should not repeat. Could you please expand on these errors?

Paulo Frazão: What happened in European countries is that, with the fall of Berlin Wall, many systems of water fluoridation were abandoned, because these systems were maintained by the State. Countries in Eastern Europe lost these systems not solely from a change in ideology, but also because dental caries was decreasing. The rationale is not that clear; there are other determinants, such as the role played by the State. However, they were also swayed by the decrease in the prevalence of caries. This is a grave error, to think that, just because dental caries was decreasing, prevention measures could be discontinued. Another error is to maintain our teaching models. Many European countries have been unable to revise their teaching models to emphasize health promotion and prevention. The inability to make these changes is a mistake, and an erroneous change is also a mistake. These are two examples of mistakes that should not be repeated in Brazil.

Jaime Cury: With regard to making mistakes that others have also made, unfortunately this happens with everything, society, pollution and more specifically dental caries. There has been a reversal of trend in the child population because in Europe there have been caries-free generations. I belong to a generation of edentulous individuals and I was still able to keep my teeth. My two children do not have caries. What do you think might happen to their children? My children do not believe that caries exists, and this has already happened in Europe. There has been a reversal of trend in children of caries-free generations that had more caries, because all the care that I had with my children will probably not be provided to their children. This has happened in the child population and will probably happen in the adult population. I am an independent adult aged almost 65 years, yet a dependent elderly adult is like a child, with all the related health problems. Oral health is a behavioral problem, worsened by the fact that younger Brazilian generations will have more teeth in their mouths with greater exposure of root dentin when they reach my age. Milk is not cariogenic for enamel, yet it is for dentin. All starchy products that are not cariogenic for enamel are cariogenic for dentin, and the elderly population tends to have a different diet compared to children. Dental caries may not be eradicated, we will co-exist with caries for our entire lifetime and, as the risk and protection factors change, we must also change.

Sônia Chaves: Jaime Cury, it seems clear to me that we could continue using fluoride in concentrations above 1,000 ppm in younger children. However, if there are studies discussing the social inequalities related to the socioeconomic status of the child's family in relation to the bioavailability of fluoride and fluorosis in this group, are there studies attempting to gather a cohort to reveal this association?

Jaime Cury: Fluoridated dentifrice is a risk factor for fluorosis, yet this fluorosis is not significant. The overriding discussion on fluoridated dentifrices concerns the dose ingested. All studies are based on this fact: "the child eats yogurt, the yogurt contains a certain amount of fluoride, if the child eats some yogurt, in proportion to the child's weight, he/she will receive a certain dose, thus there is risk of fluorosis because it is greater than 0.07 mg/kg per day." This dose is empirical, without a longitudinal study concerning the dose-effect relationship. This occurs particularly with dentifrices with 1,500 ppm and

the unequal rates of fluorosis. The dentifrice of the Family Health Strategy or popular Brazilian dentifrices contain 1,500 ppm because they are made with MFP and carbonate. Part of the fluoride is always inactivated by the abrasive. So, 1,500 ppm is used to chemically maintain at least 1,000 ppm up to the expiry date. Other dentifrices without calcium in the abrasive and that contain silica may be formulated with 1,000 or 1,100 ppm, maintaining a constant concentration. I am sure that there is no chance of placing individuals that use the dentifrice of the Family Health Strategy at higher risk. What raises more concern about this dentifrice for me is whether its fluoride concentration will effectively control caries. The risk of fluorosis with the dentifrice is not related to toothbrushing, but rather to the child handling and eating the dentifrice. Studies clearly demonstrate that, when a dentifrice is used to brush the teeth, there is an anti-caries effect and a risk of fluorosis. But when the child eats dentifrice, there is only a risk of fluorosis and the benefit is negligible. In Brazil there are no significant investments in education. I consider myself an educator. Using fluoridated dentifrice or brushing the teeth is an educational process like any other. The educational process is a continuous one, which is initiated by examples of daily life, which include the use of dentifrice. This discussion is more complex and is framed within a context; as it refers to an integral approach, this discussion is broader than the standpoint of an isolated problem.

Mariângela Matos: Even in alternative models of the Family Health Strategy, the practices may be disease-centered. How can this be changed?

Sônia Chaves: I think it is very difficult to change the way dentists carry out their work. The disease model, in which the clinical work and knowledge are used to transform the disease dental caries into a restoration, is still in place and also renders dentistry a social practice, one which reduces pain and suffering. Thus, the path to change is more outside than inside the field of dentistry. However, the primary-care professional should broaden his or her knowledge, to promote practices that combine clinical knowledge and other practices. For example, I conduct activities with schoolchildren, using a worksheet containing the dmft, DMF and a subjective view of this examination; based on that, I can educate the teacher. This worksheet can be used as an information system, to provide a broader epidemiological perspective on the planning of actions at the school. Dr. Armínio, a cardiologist at Hospital Ana Nery, suggests that people create their own strategies to advance beyond the damage and beyond the risk. Recently, we thought about addressing the risk by analyzing the profile of the mothers. Most mothers at the school were domestic employees, with more formal education than their husbands, which may indicate the socioeconomic status of the child and help with planning.

Efigênia Ferreira e Ferreira: The first aspect that I deem important is that health should be promoted in a positive way. One of the most difficult things is to promote the idea "be healthy; if you do some things, you will be healthy," whereas the norm would be "don't be sick; if you do some things, you will not be sick." This is an interesting strategy: rather than addressing the diet at the school, address what is a good diet; rather than addressing toothbrushing, work with hygiene in general. There are some obstacles to this: first, we must acquire the competence to do this, and build multiprofessional relationships. Dentistry alone may not be able to cope with all of these aspects. Thus, we must coordinate with professionals in education, sociology and the arts. The schools have the PET-Health, which enables coordination with other health professions. We know our limits with regard to education and this is the first barrier. The second barrier is a society with a culture of focusing more on not being sick than being healthy. Then you may get another opinion: "you may do this if you are healthy". However, this is not culturally absorbed by society, just like when we discuss the need to change the curricula of dental schools and address other questions besides the great volume of knowledge on operative and restorative dentistry. The public also has great expectations for the restorative dentist. However, I had a positive experience in a private clinic, where I worked for 33 years and conducted my practice based on this knowledge, where people considered me a more conservative, preventive professional.

The patients trusted me and I gradually changed many things in my clinic. Changes take time and one cannot say that it is difficult, or that the difficulty is impossible. I am not concerned about achieving that in five or ten years anymore, but I am sure that I am laying the groundwork for someone else to continue on, because I am sure that changes are cultural, both for the patient and the professional.

Mariângela Matos: You are talking about professional interaction, and yesterday I reflected on a term used by Samuel Moysés, namely trans-sectorial actions. We have been unable to achieve intersectorial collaboration and the discussion has already moved on to trans-sectorial collaboration, such as education practices.

Catharina Matos: With regard to education, there is the belief that education solves everything, but we face a dilemma, because education is just a strategy. Personnel in health services have certain established practices, thus we address the educational question from another perspective, i.e., what we know, and pursue reconstruction from there. There is a strategy of problematization and another perspective from this formative process. However, there is the reproduction of educational practices within the Family Health Strategy, which is related to primary up to university education. Thus, people unconsciously incorporate these practices and reproduce them in their work environment. It is very hard to change practices in the field of oral health; these technologies presented by Sônia Chaves as a possible way of introducing changes in practices are relevant, and undergraduate education may aid in these changes.

Efigênia Ferreira e Ferreira: Removing the educational model from the practice is not a good idea, because when we started to change the program at the school, the teachers themselves asked: "when will we get to toothbrushing?" Our idea was not to work on toothbrushing; rather, we wanted to work in modules, e.g., one module on diet, one on hygiene, then the teachers would do the seminars with us. We would organize an activity with one supervisor, so that the teacher could work with modules of the Family Health Strategy, including safety, culture of peace, hygiene and nutrition. Finally, I would like to say that we must be more innovative, more creative with the theoretical framework proposed by Naomar de Almeida Filho and Jaime Breilh, who talk about research from the Northern hemisphere, because there are two hemispheres, North and South, and research has shown that we still need to invent new ways of doing things for Brazil. I think this is a good way for us to begin to find our own way to do things, targeted to our population.

Célia Galitesi: Within a study you want the practice, thus this is a call for students to contemplate and share, because Brazil has been passively constructed for many years. Things are not like that anymore; students and teachers are the new policy makers. By ourselves, we are unable to achieve anything; the process should be transdisciplinary, interdisciplinary. I have contributed, from a complementary integrative perspective, on the issue of developing and stimulating reflection through education, art and the clinical work itself.

Mariângela Matos: With regard to health education, we have observed that the Oral Health Team of two cities in Bahia provides 100% coverage, whereas only 30% of people attending the basic health unit receive health education. The official documents show that the health education proposal of the Brazilian Health System should be directed toward self-care and to empowering individuals as citizens. There is a broad gap between policies and practice. What can we do to resolve this?

Paulo Frazão: We should look at the needs, how many individuals need to receive health education? But first we must determine the health needs. First you have to figure this out, then you can think about what to do. Thus, this is an important question when addressing oral health needs. Another aspect concerning the strategies for change is to believe. I am a professor; we have to believe in our role as educators. I think about Canada and England. Canada is restructuring their education system from the standpoint of interprofessional education, which involves the integrated training of nurses, dentists and physicians. England is addressing the idea of interprofessional cooperation, in an effort to strengthen the links between professions. Another important aspect is the flexibilization of frontiers

and jurisdictions between professions. Thus, this interprofessional relationship and integration of work between professionals dealing with related areas changes how we work and consequently allows us to make changes to how we educate. This is because the world of education has certain characteristics, which change when we move to the work world. We must change both worlds of education and work.

Nilce Tomita: Thinking about the future and also because of Marcelo Bönecker's contributions in the field of dental practice focused on promoting the health of children, I would like to ask him to talk about health education from a perspective that takes into consideration epidemiological changes, with these issues addressed by the other lecturers, such as public policies, programmatic actions and coping with inequities.

Marcelo Bönecker: A question came to mind during the lecture of Samuel Moysés: what is the objective of the curricular changes under way in the dental school where I work? The aim is to make education more like the real world, by taking into account what the students will do when they finish dental school. It is pointless to teach dentistry with different levels of complexity, up to a high level of complexity. The dental school where I work has approved a curriculum including a course on implantology, which has a high level of complexity. We are still exposing our students to certain experiences in dental school; for example, in the first year the student is exposed to biochemistry, spending one year in pediatric dentistry, one year in endodontics. The undergraduate student goes to the primary health care clinic, where he experiences it, makes a diagnosis, thinks about it, yet how much of the four years of dental school is spent working on some type of public policy? We are revamping the educational approach because this is our duty, but from the "upstream-downstream" viewpoint forwarded by Aubrey Sheiham, we are only reinventing something "downstream". To what extent are we offering an actual opportunity for the student to work "upstream" as a high-impact policy maker? Very little, and we also spend too much time with practical work in biochemistry, implantology, endodontics, pediatric dentistry. We must broaden this to include policy making; we must empower our students, endowing them with a different perspective, more targeted toward primary care. We are not encouraging our students enough to work as leaders. There are many brilliant individuals, yet we need more, we need a critical mass, we need involvement.

Nilce Tomita: We are now open to questions from the audience.

Audience: I come from a private school in Santa Catarina, which was established following the new guidelines from the Ministry of Education and Culture, focused on integrating subject matter and promoting prevention. We have programs that are working well and, in the school where I work, I tell the students that they will have to change the culture of the region, which is very poor. The policy of the city is to not add any more jobs; thus, to change health care, there is a need to change policies to generate jobs, opportunity and teaching. We must stop to think about these questions, not only with regard to oral health; we must think about health as a whole and about strategies and policies that reach the general public.

Audience: I would like to salute all lecturers and particularly professor Jaime Cury; you are an inspiration to us and our dental practice. I proudly work in the Public Health System and I attended a public school in Bahia. We were not taught to think about public health at school; we do not think about the crisis in education, we are unable to make policies for our city. My patients come to me and say, "doc, I want you to pull out all my teeth." Because pain is an individual experience but dental pain is a collective experience, it lies within the collective unconscious. People who have never felt pain may understand the dental pain associated with dental treatment. How can this be reversed? What can we do about the image of the dentist who causes pain?

Sônia Chaves: The expansion of this knowledge goes beyond dental caries, and resides with the risk factor, or determinant, which also passes through the need to expand training. However, training will not solve the problem. Sérgio Arouca, in his book "O dilema preventivista" (*The preventive dilemma*), writes that the greatest challenge of the ideological movement of preventive medicine in

the United States aimed at fighting the public health system in place in the United States at the time, not advancing it. A well-trained physician will have a more preventive attitude, and thus people will be healthier. However, what about the structural aspects, i.e., how can a dentist be paid today through private health insurance? He is not paid for his ability to promote health, but rather for the dental restorations he places. This dentist faces an ethical dilemma, because he has the knowledge; however, the structure does not allow attitudes to change, which is an obstacle in the private health system. In the public system, managers can earn promotion, and the team can earn more if the DMFT is reduced for two years, and if the proportion of children followed by the Oral Health Program rises. This is one of the strategies that uses indicators of outcome to adjust salary, and not indicators of disease. Thus I am optimistic, because this enables us to address structural issues in our country. Within this context, the contribution to oral health will be much greater than dentistry itself, even though I still believe that it is possible to make strides in knowledge in a care model that includes the question of risks and health determinants.

Svante Twetman: We are more than just dentists, we are health professionals. The dentist plays a fundamental role, because our profession has a unique opportunity. We tend to see patients regularly, which does not happen in medicine, thus we can screen patients, with an initial diagnosis of several health conditions. In my dental school (University of Denmark), the students are taught to check blood pressure, and hypertension is often detected by the dental student, who refers the patient to a cardiologist. Several conditions are common risk factors to some diseases, such as diabetes, metabolic syndrome and periodontal disease. Other systemic factors are involved in a common risk factor for caries and periodontal disease, and the dental student has an important role in aiding this diagnosis and referring these patients to the appropriate medical professional. Osteoporosis, for example, may be detected by oral radiographs and the student should be trained with all this knowledge. In Scandinavia, dentists and dental nurses are the professionals in the best position to help patients to stop smoking, much more so than physicians.

Audience: We are experiencing a change in the curriculum, in which the community dentistry professors participate in nearly all subjects. I think we are running the risk of underestimating the importance of the "brief lecture," the "brief toothbrushing demonstration," because we are focusing on integration, and this may be understood by students as being less important. I work with prevention in periodontics and every day I see young people who do not know they have the disease, which is preventable, and they do not know how to perform mechanical biofilm control. Renato Russo once said, "I wish the simplest was seen as the most important." It is necessary to go further, involve teachers, physicians, nurses, clinics and families. There is this trend toward involving everything that is important, yet the individual is also important, thus everything must be combined.

Lilian Marly de Paula: In universities and in the field of professional practice I have continuously observed a dichotomy: what's appropriate for the clinic and what's appropriate for community dentistry. As long as we are unable to work in an integrated manner, we will not make progress, because one assigns the responsibility to the other. Then, it is not a matter of placing a community dentistry professor inside the clinic, but rather to integrate the work of the clinics and community dentistry, with an expanded view, otherwise we will end up perpetuating the situations. People must see health as a single objective. Therefore, as long as we say that "this field belongs to community dentistry, the discussion of policies belongs to community dentistry and the discussion of individual practices belongs to clinical specialties," we will continue to perpetuate this model, and it is much easier to go on divided, because then nobody can be held responsible. Therefore, efforts should be centered around unifying what we want, in an attempt to integrate the practice of dentistry.

Audience: Professor Svante Twetman, people like to use mouthrinses, also as a substitute to toothbrushing, since mouthrinses eliminate 90% of bacteria. What is the impact of this bacteriological

extermination on oral and general health?

Svante Twetman: Mouthrinses are more effective at making the patient feel comfortable in relation to halitosis than actually fighting caries or periodontal disease. Mouthrinses do kill many bacteria in the laboratory, yet *in vivo*, with the biofilm, they are not as effective. It should be remembered that each milligram of biofilm contains millions of bacteria and that, even though the mouthrinses may kill many bacteria, a significant amount of biofilm remains in the oral cavity. Attention should be given to mouthrinses containing fluoride, because this would combine the antimicrobial action with a contact medium with fluoride in the oral cavity. No well-designed studies are available to provide any evidence of bacterial elimination with the use of antiseptics; actually, there are studies demonstrating greater effectiveness of wide spectrum antimicrobials such as chlorhexidine.

Audience: I would like to ask Professor Marcelo Bönecker about his experience with ART.

Marcelo Bönecker: I feel comfortable talking about ART because of my postdoctoral work in South Africa, with communities that only spoke Zulu, and I have worked with ART, ten years ago. This is an approach that we still advocate. I am associate editor of the Brazilian Oral Research journal, whose last edition published an editorial on the use of modified ART in Brazil. In Brazil we do not have experience in using ART, we have experience with modified ART, because we do not break the enamel without dentin support using manual instruments; rather, we open the cavity with a bur and then treat it. In Brazil we use the modified ART. With the ART method, it is an experience that causes less pain for the child, it is easier for the child to accept this type of treatment, and it is a permanent solution if the powder-liquid ratio of glass ionomer is correctly used. In comparing the brands of glass ionomer (one national and two imported), the results are very similar, which demonstrates that the results do not depend on the commercial brand, but rather on the correct execution of the technique by the practitioner.

Audience: Professor Jaime Cury talked about toothbrushes and dentifrices distributed by the Ministry of Health. He is concerned about the soluble fluoride and I have another concern: since 2010 we have not received dentifrices and toothbrushes. The dental floss is not included in this kit. How can we talk about oral hygiene if we only have toothbrushes and dentifrice? ABOPREV and all of us should ask the Ministry of Health to provide toothbrushes and dentifrices with appropriate fluoride content and dental floss.

Jaime Cury: In some cities, kits are thrown away because of the expiry date, and in other places the kits do not arrive, so it is important to complain. Concerning dental floss, there was a concerted effort to incorporate what is scientifically proven, and the biggest problem with dental floss is that there is no evidence that dental floss improves outcomes when teeth are properly brushed. When reviewing papers on caries and periodontal disease, there is no strong evidence to recommend dental floss. It seems to be much more important to use dental floss to remove food remnants between the teeth than the biofilm itself.

Audience: I am a professional with the Family Health Strategy in Salvador, for 11 years. One person in the school told me: "you are too good to work on the outskirts of Salvador," and at that moment I asked myself: what are the schools doing? Preparing dentists for the poor and dentists for the rich? Because training is still distorted, with emphasis on private clinics. This professional, out of a sense of survival, will be an employee in the Public Health System! It disturbs me when a professional says: "I will not work with health education, I don't like it." As professor Svante Twetman said: we work a lot with hypertension, diabetes, leprosy and tuberculosis. We are skilled at early diagnosis; yet, since dentists are often unable to do it in their dental practice, we are unable to convince the other professionals. Therefore, in general health, we are involved with other professionals, while oral health is not addressed by them and very poorly addressed by us. I find this disturbing.

Catharina Matos: The traditional public health system is as hegemonic as the model we have been discussing. The advent of community dentistry questions the traditional public health model and

proposes a new direction for the practice of dentistry. The field is trying to take this direction with community dentistry. So, what are the guidelines for reorganizing a curriculum? When we think about community health, it is necessary to learn how to analyze the current state of health care, and use technologies for planning of social sciences.

Sônia Chaves: I would like to thank everyone for the broad perspectives on dentistry they have brought to this discussion. Despite our different points of view on these issues we can still work together with this diversity of ideas. I will cite a passage by Antônio Gramsci: "against the pessimism of the intellect, the optimism of the will." This is the message, even though we may not be able to perceive the world with the objectivity of sociology, this does not rule out the optimism of the will in me. The theoretical learning will occur in practice because no undergraduate education can address the complexity required in these multiple dimensions.

Audience: I work with health management in the city of Cuiabá and also with teaching, and we ensure delivery of kits containing toothbrush, dentifrice and dental floss, through a law enacted by the City Council. Every three months, the city ensures that all 50,000 schoolchildren will receive a kit. Patients served in the ten dental clinics also received these kits. We work with ART and in one and a half years we have cared for 12,000 schoolchildren. We needed the health project at the school because we do not have an oral health team in the Family Health Strategy in Cuiabá, and we have been successful with ART.

Svante Twetman: I would like to call attention to an important aspect, that all scientific evidence is global, yet when publishing guidelines for the use of a certain product or practice, we should consider the local conditions and adapt the evidence to the setting, because this evidence may not only be applied to our local conditions and this should be considered when making decisions.

Catharina Matos: One participant in the audience mentioned that the Public Health System is for the poor; these are distortions observed in our daily practice: the public system is bad, the private system is good. We must break down these paradigms, and rebuild the political and ideological direction of society, to rethink the health system and health policies.

Efigênia Ferreira e Ferreira: With all of the changes Brazil is going through, of which there can be no doubt, we do what we can. I'd like to highlight two further things: the first is an issue discussed in community dentistry regarding the individual and collective, and also about the public-private and the collective. Community dentistry does not need to go to the clinic if there is transdisciplinary interaction with a professional from the clinic. How can you plan and evaluate a health service without taking into account individual care? The second concern comes from professors Jaime Cury and Paulo Frazão, regarding the improvement in oral health of adults and the elderly: there should be a minimum to ensure we do not start to move backward, that is to say, we must remain vigilant.

Audience: This question is for Paulo Frazão. There have been some epidemiological surveys conducted in Brazil, from 1986 to 2010, and in 1986 an attempt was made to break these surveys down into the cities and states. Why have we been unable to do this so far? Why are we unable to plan and evaluate our health system?

Paulo Frazão: Many things must be separated. There have been attempts to include the importance of accurately and precisely measuring these events and monitoring trends in the agendas of the Ministry of Health, Health Surveillance Secretariat and the Health System, to get a better understanding of our situation and make proposals for changes. I share the concerns of professor Svante, that 90% of research funding is directed to diseases that are not important for community dentistry. Only 10% of funding is targeted to diseases that are important from a population standpoint, which demonstrates some inequality. I would like to thank ABOPREV. I have always looked forward to participating in the symposium to do this thinking, identifying several aspects in which to delve deeper, to avoid being stuck to our individual experience.

Célia Galitesi: This final segment is pleasant because words of encouragement appear, making a cycle, like a process that includes crisis, discussion

and closure. I was invited to present a conceptual question that, in practice, may not yet be immediately applied. I would just like to thank ABOPREV for the courage to be open to renew the concepts.

Sônia Chaves: I've been thinking about the role of ABOPREV, a courageous association dedicated to health promotion relying solely on the selfless interest of its members. This is fundamental to keeping this idea alive, that we are together and that the role of the association is to spread valid and socially important technical and scientific knowledge, so that our society may benefit from good oral health and be free of caries.

Jaime Cury: I would like to express my satisfaction with this congress organized by ABOPREV, which has provided me with many good opportunities during my university career, to participate in congresses. The master symposium is important, I learned a lot listening to questions and we take a lot home to think on. One of the aspects of my university career that touched me the most was when I tried to enter the field of health education, when my son, aged 13 years, asked me to help with his science exhibition at school. To demonstrate the importance of fluoride to children, I designed an egg test. A boiled egg was placed in a glass half full of fluoride gel, then it was placed in a glass filled with vinegar. After washing, you could see that the half of the egg treated with fluoride did not undergo dissolution, concluding the rationale on the effect of fluoride on the caries process. This science exhibition was reproduced in several places in Brazil, and then a student from Minas Gerais wrote me saying that she would like to do a science exhibition, and I taught her the egg test using dentifrice. A month later, I received a letter from a school principal from Caxambu, Minas Gerais, thanking me for responding to their request. That information was important not only for the child, but for the entire school, in 1993. I have won several prizes, most recently in Montpellier, the Ericson prize, but, for me, my most coveted prize is the letter from this principal, from the standpoint of the contribution I made to the school in offering an idea. I have focused my life on trying to be useful.

Marcelo Bönecker: I would like to thank all my colleagues for the change we have achieved, but I would also like to thank the audience, because when we share there is always integration. I have gained much from listening to your experiences, and I am happy to have come back to ABOPREV at this moment, thank you very much.