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Equity, social inclusion and health promotion: major challenges*

Currently, there are several issues that deserve attention in the area of oral health promotion, such as dental caries, oral health programs and oral cancer. These issues were discussed during the 18th Congress of the Brazilian Association for Oral Health Promotion (Associação Brasileira de Odontologia de Promoção de Saúde - ABOPREV), held April 11 to 13, 2013 in Bauru, SP. In the ABOPREV symposium, the panelists responded to questions presented by the audience related to their presentations during the Congress, whose central subject was "Equity, social inclusion and health promotion: major challenges." This text summarizes the ideas presented during the debate. To enhance the reading, the subjects were grouped in thematic sections in this paper: dental caries, dental erosion, dentifrices, primary care and health care, risk factors for oral clefts, and oral cancer. The reflections produced from the discussions on these topics advance the understanding of some aspects that constitute challenges to the implementation of measures to promote health with equity, respecting the diversity of opinions expressed by researchers and professionals in the dental area.

The following professors participated in the symposium discussions as panelists: Joana Christina Theodoro Carvalho (Université Catholique de Louvain, Belgium), Jaime Aparecido Cury (University of Campinas, Piracicaba, SP, Brazil), Vera Gil da Silva Lopes (University of Campinas, Campinas, SP, Brazil), Marina Gallottini (University of São Paulo - USP, São Paulo, SP, Brazil), Vera Lúcia Ferreira Mendes (Ministry of Health, Brasília, DF, Brazil), Marília Rabelo Buzalaf (University of São Paulo - USP, Bauru, SP, Brazil), Efigenia Ferreira e Ferreira (School of Dentistry, Federal University of Minas Gerais - UFMG, Belo Horizonte, MG, Brazil), Laura Macruz Feuerwerker (University of São Paulo - USP, São Paulo, SP, Brazil), Cesar Migliorati (University of Tennessee Health Science Center, USA), Lucas Zago Naves (University of Campinas, Piracicaba, SP, Brazil), Fabricio Bitu (Federal University of Ceará, Fortaleza, CE, Brazil), Marisa Maltz (Federal University of Rio Grande do Sul, Porto Alegre, RS, Brazil), Lilian Marly de Paula (University of Brasília - UnB, Brasília, DF, Brazil) and Nilce Emy Tomita (University of São Paulo - USP, Bauru, SP, Brazil).

Nilce Tomita: I am pleased to open this ABOPREV symposium, which has already become a tradition, a meeting where all panelists may participate to exchange ideas, a debate in which the audience may participate with questions, expressing their doubts and opinions. The panelists may respond to these questions and promote the necessary reflections on the subject proposed for this congress. I would like to ask Prof. Marisa

Maltz, one of the moderators of this symposium, to present one of the questions presented by the audience.

Dental caries diagnosis

Marisa Maltz: We will begin by having our first panelist, Prof. Joana Carvalho, respond to a question about the basic conditions for clinical examination in clinical research and the need to perform prophylaxis for evaluation of decayed surfaces.

Joana Carvalho: One of the basic conditions for clinical examination is working with the best instruments available to perform a good clinical examination. Not much is required: good lighting, a dental surface without plaque and drying. This drying depends on where we work, i.e., in a dental office, under ideal clinical conditions, air-drying may be used. Conversely, this may not be possible in a field study, yet we may use gauze to dry the surface. This is important if we intend to detect clinical alterations preceding the dentin cavity stage. If this is not the goal, surface drying may not be necessary, yet it is certainly necessary to have a well-illuminated surface without dental plaque. Prophylaxis before evaluation of decayed surfaces is necessary, yet not necessarily using rotary instruments for plaque removal. This may be done with a toothbrush. If the plaque is mature, it may not be possible to remove all the adhered plaque with the toothbrush. In field studies, orange-colored dental plaque in the maturation stage is more difficult to remove by brushing. If we are unable to remove the plaque in such situations, a periodontal probe may be used for that purpose.

Marisa Maltz: Since the discussion is about the diagnosis of carious lesions, it would be interesting to discuss some aspects related to the diagnosis of brownish non-cavitated lesions of the International Caries Detection and Assessment System (ICDAS). I would like to ask Prof. Joana Carvalho to discuss the need for this diagnosis, the meaning of this recording system in epidemiology and its relevance.

Joana Carvalho: Actually, the ICDAS has not offered anything significantly new in clinical diagnosis; clinical diagnosis has merely been standardized on a progressive scale. The great advantage is

that many people who had not used this method previously have started to adopt it. However, the utilization of this system may reveal a prevalence that does not correspond to reality, mainly because it is very hard to differentiate between a pigmented fissure and a fissure with a non-cavitated lesion that was inactivated on the occlusal surface. Therefore, if everything that is darkened is considered caries, this yields an outcome of 96% of caries prevalence. In my opinion, if we have subjects in a study that only have inactive non-cavitated lesions, they should be considered caries-free from a clinical standpoint.

Participant: I was very excited when I first used the ICDAS because I believed it might significantly contribute to eliminating the bias of different approaches to caries diagnosis, including arrested, active and inactive. However, utilization of the ICDAS is nearly impossible; in fact, it added data that did not contribute to the establishment of a dental policy to define caries prevention strategies, for example.

Joana Carvalho: Diagnosis must be associated with the treatment decision. When considering a cavitated lesion in enamel, how does this change your treatment decision? It doesn't, because if it is active with a small cavity in the enamel, it will receive the same treatment as an active non-cavitated lesion. We work with caries activity because this is the most important point in the caries process, indicating whether the process is active or not. If it is active it requires some type of treatment, which may involve different degrees of complexity, yet if it is not active, it will not require this series of treatments but only basic maintenance, including toothbrushing, dental plaque control, etc. The ICDAS is a validated method. It may be used in research, in practice, yet it should be critically used, as should any other method, requiring knowledge on how to interpret the outcomes. It is pointless to only have numbers; you must know how to interpret them.

Jaime Cury: The ICDAS consists of a good attempt to normalize the diagnosis, prognosis and treatment of dental caries. However, the DMFT of the WHO, has been used since the last century. If the index is changed, the reference is lost. The application of the ICDAS in field conditions, such as in people's homes as was the case in the last national

Brazilian survey (SB2010), is even more difficult. However, it must be understood that the WHO criterion considers the presence of cavity as the outcome, based on the old surgical-restorative model. When it was proposed it was necessary to know how many cavities were present to plan how many restorations would be necessary.

Marisa Maltz: In fact, the ICDAS provides an interesting contribution, since it relates to the clinical and histopathological status, organizing the knowledge. If my goal is to diagnose cavitated carious lesions and I am working on prevalence considering a certain diagnostic threshold, it should be clear what my diagnostic threshold is. Thus, if we consider the cavity as the diagnostic threshold considering the history of caries, this information must be presented to allow comparison of the history. If I want to know the disease process or the existence of any episode of demineralization, even self-controlled, then I reach a threshold of non-cavitated lesion. Selection of the index depends on the goal. If the treatment concepts change, the diagnostic criteria must also change.

Joana Carvalho: Concerning utilization of the WHO criteria by the government, the fact that this criterion has been used so far does not prevent us from making more accurate diagnoses from now on, since they are comparable, yet with additional information. In the research conducted by us in Brasília, we demonstrated that caries reduction in children in the 1996 to 2006 period occurred mainly in the number of active non-cavitated lesions and we simultaneously observed a significant increase in the prevalence of caries-free children at the clinical level.

Marisa Maltz: I have a question for Prof. Joana Carvalho and Prof. Efigênia Ferreira e Ferreira. For children with high caries risk, would it be advisable to apply sealants to avoid caries during eruption of the permanent first and second molars, which is the period of highest risk?

Joana Carvalho: In a patient with high caries risk, we should think about the issue of whether sealants should be indicated. The sealant protects a surface. A person with high caries risk does not have caries only on the occlusal surface. Only individuals

with low risk have caries restricted to the occlusal surface. When only the occlusal surface is protected, the sealant may be lost, because there may be proximal caries. In a patient with high caries activity, the mouth must be controlled as a whole and, if a particular problem persists on the occlusal surface, the sealant may be applied, which should be understood to be part of a global treatment. This will not solve the problem of high caries activity in a patient and should be indicated on an individual basis.

Efigênia Ferreira e Ferreira: This is exactly the clinical approach, as described by Prof. Joana Carvalho. However, the risk assessment has a limitation in that it reflects a particular moment in the life of the patient. The sealant is a barrier, as are other measures based on the risk. If we offer assistance considering the mouth and the person, in the end we might have better outcomes, because we will address the health of individuals. There is a high probability of sealant and proximal caries. There are children whose teeth were sealed in infancy who had proximal caries in adolescence. I insist on addressing not the high risk, but the high vulnerability, and if the higher probability of having caries is included, the procedures are the same, namely procedures for health promotion.

Joana Carvalho: I would like to follow up with a question about tooth eruption. During tooth eruption, we have great difficulty controlling the humidity during sealant application. Even with a nurse using a suction appliance, a humid situation may lead to sealant loss and, secondarily, there may be a site of greater plaque accumulation, which requires care. Glass ionomer sealants are less resistant than composite sealants. I believe a topical fluoride application is the best option.

Dental Erosion

Lilian de Paula: Changing the subject, we now have a question for Prof. Marília Buzalaf. You made a comment on regular/normal and light soft drinks. Have you conducted any studies on “zero” soft drinks?

Marília Buzalaf: The light soft drink was occasionally observed in a study that revealed lower erosive potential compared to the regular/normal soft

drink. The “zero” soft drink has a potential similar to that of the regular/normal one. Not all light soft drinks are less erosive than their regular counterparts. The reason for this is still unknown.

Participant: I have been concerned about erosion. Nearly two tons of dentifrice are sold every day. Is it possible to control this, so that the industry is more careful about the abrasiveness of dentifrices?

Marília Buzalaf: This subject should be further addressed. Maybe the sanitary surveillance authorities might have some role in this context, because currently this information is not provided on labels, and abrasiveness is an important factor in connection with erosive challenges. Generally, it is recommended to avoid whitening dentifrices, which usually have greater abrasive content.

Participant: Who could check this? The Regional Dental Council (CRO)?

Marília Buzalaf: The CRO could possibly be involved, but the information provided on the label is under the control of the National Sanitary Surveillance Agency (ANVISA), which determines the guidelines that the manufacturers must follow.

Participant: I work for the sanitary surveillance agency and would like to make a comment on the abrasiveness indicated on labels. Within the ANVISA there is a sector dealing only with product labels, and the latest guidance provided to us is that some information on product labels, either for foods or hygiene products, may have a negative effect on the population. By indicating that a dentifrice is more or less abrasive, the patient may understand that a higher abrasiveness would result in better tooth cleaning. The ANVISA analyzes the aspects of labels very carefully and should further assess whether this information on the label would be beneficial for the population.

Marília Buzalaf: Instead of the label, is there some other place where this could be indicated, so that the population or at least the dentists could be aware when indicating products to their patients?

Participant: We, as professionals, must communicate with our patients and the population through the federal and regional dental councils to establish standards. The standard would be the professional, valuing regular follow-up at the dental clinic. We

still need policies in this direction.

Jaime Cury: ANVISA shall do nothing, because focuses on the health of the population and there is no clinical study demonstrating that the abrasiveness of dentifrices is related to tooth wear. According to the literature, tooth wear is more related to toothbrushing technique than to dentifrice abrasiveness itself. A laboratory study can reveal differences in abrasiveness, preceded or not by an erosive challenge, which will show differences, because a constant toothbrushing pressure was simulated. The clinical evidence does not reveal this relationship. Obviously, abrasives in dentifrices are essential to assure tooth cleaning and polishing. If a dentifrice does not contain abrasives, the toothbrush may remove the plaque but not the pigmented pellicle, thus some abrasiveness is necessary. If the label indicates greater abrasiveness and greater cleaning capacity, individuals may relate this to tooth wear and might not buy it. If lower abrasiveness is claimed, then it may be sold. This happened with a children’s dentifrice that was commercially advertised as a “low abrasiveness dentifrice that will not wear your children’s teeth.” Later on, mothers whose children used this dentifrice attended dental clinics complaining that the “teeth were stained,” believing this was related to a dye in the dentifrice, which was not the reason. The dentifrice was initially introduced with an abrasiveness of 30, which was not sufficient, because children do not brush their teeth enough to remove the staining. Subsequently, the abrasiveness was increased to 80 and this solved the problem. The dye used in the dentifrice was the same, but the abrasiveness had been increased. The lack of information on abrasiveness on labels is due to the fact that there is no clinical study to support this. Thus, the decision was made to avoid causing alarm in the population.

Marisa Maltz: We have another question for Prof. Marília Buzalaf. The studies conducted by your group on green tea extract were designed to prevent or treat erosion?

Marília Buzalaf: They are designed for prevention; especially with regard to green tea, which has an active principle that is a polyphenol that inhibits some matrix proteases, because dentin has an impor-

tant organic content that plays a fundamental role in the progression of erosion. If this demineralized organic content is maintained on the surface after the erosive challenge, there will be an inhibitory buffering effect of ion diffusion, and the progression of erosion will be smaller. The polyphenols and other protease inhibitors preserve this demineralized organic matrix on the dentin after the erosive challenge, and this provides protection and reduces progression of the lesion. Thus, these are preventive measures.

Marisa Maltz: What is the evidence for the relationship between a lactovegetarian diet and susceptibility to erosion? And what would the cause be?

Marília Buzalaf: This could lead to a mistaken interpretation because milk would have a protective role in erosion. The question is primarily related to the vegetarian diet, because the people following this type of diet have greater than average consumption of citric fruits and beverages, which have a well-established association with erosion. Theoretically, they would be patients at higher risk that might benefit from the preventive measures mentioned in the lecture yesterday.

Dentifrices

Marisa Maltz: Prof. Jaime Cury, why do we still see well-informed parents who have their children use non-fluoridated dentifrices?

Jaime Cury: I believe that if parents are well informed, the first thing we have to find out is what the reason is. Parents may complain that they cause cancer or kidney problems, as stated by some medical doctors. It is necessary to know the reason, so that we may better address parents' concern about having their children use a fluoridated dentifrice. Once I had a negative experience with a niece whose pediatrician advised her to avoid having her daughter use a fluoridated dentifrice. When she asked why, the doctor said that this might cause kidney problems. Medical professionals have always supported dental professionals, including with regard to water fluoridation. In a symposium conducted two years ago, there was a representative of the Brazilian Society of Pediatrics. He transmitted the consensus of this discussion to this society, which currently disseminates these recommendations through its website. Regard-

ing communication, the pediatrician Danilo from Rio Grande do Sul, in an evidence-based discussion, mentioned that dentifrices must have at least 1,000 ppm of fluoride, but a small quantity should be used and toothbrushing should be supervised by parents or caretakers. There must be a consensus on what is a small quantity: one seed of rice, bean, pea, or lentil? He used the term employed in Rio Grande do Sul, namely a "smudge" of dentifrice, and I complemented: "between parentheses, one seed of rice."

Marisa Maltz: Prof. Jaime Cury, another question is why the Federal Dental Council, ABOPREV, etc. do not promote the importance of fluoridated dentifrices for caries control?

Jaime Cury: I believe ABOPREV has done this, as Prof. Nilce Tomita mentioned in the meeting, and the ABOPREV website communicates the resolution of ABOPREV concerning recommendations for use of fluoridated dentifrice. What is most important is that recommendations for use of fluoridated dentifrice are presented in the Ministry of Health's Guideline for Fluoride Utilization in Brazil. We need to know why individuals do or do not use it. Once we know why, we may question and discuss why fluoridated dentifrice is not being used. I received an e-mail from an Argentinian who asked "what is happening in your country? A colleague went to a drugstore in Búzios, in Rio de Janeiro, and saw a fluoride-free dentifrice with the advertisement on the label saying that it does not cause fluorosis." Another dentifrice advertisement stated that fluoridated dentifrices are forbidden for children younger than 6 years of age. These statements conflict with everything that is known on the subject. I am not concerned about these dentifrices, because they are expensive and not widely used. My concern is from the standpoint of public health. Someone mentioned that "children's dentifrices' labels state they should be used by children older than 6 years." This is not written on this dentifrice. It is written that "children younger than 6 years of age should use a small quantity of dentifrice under parental supervision." This is the recommendation of ANVISA. People read this on other dentifrices and mistake it for the statement printed on the label of the most widely sold children's dentifrice. This is a problem

for the National Council of Marketing Self-Regulation [*Conselho Nacional de Autorregulamentação Publicitária* (CONAR)], which discusses advertising and marketing messages that are not evidence-based and that cause panic in the population. I will analyze all dentifrices that advertise that they avoid fluorosis and that fluoride should not be used by children younger than 6 years of age. I will present a discussion about it and submit it to the competent institutions. Another question refers to utilization of the media, which is extremely important. The problem is that the media emphasizes bad news. I have been participating in closed social networks, such as REPIBUCO and ABRASBUCO, and I have now also joined Facebook, in which some individuals have made comments opposing water fluoridation. I replied with scientific references. Today, we have the opportunity to use social networks.

Participant: Prof. Jaime Cury, since you mentioned public health, I have been following the pediatric dental clinic over the years and I have been talking with different colleagues about the presence of stained teeth in schoolchildren, and I believe there is an urgent need for a fluorosis survey of the Brazilian population. In some publications on the quality of life I have read that fluorosis is not a concern for the children surveyed, but I believe that this is not the case for adolescents. I have had some experience with a clinic that is beginning to treat adolescents; I believe fluorosis will be a public health problem in the future, not easily addressed, because professionals must know what they are doing. In private practice, the dentist manages the patient. I had a private office and I saw that some mothers do not want to use fluoridated dentifrices because they are naturalists, vegetarians and they refuse to use fluoride, a choice we must respect. If a quality of life survey addressing stained teeth is conducted, 7- or 8-year-old children may not appear affected, yet this will be a problem for 12- to 13-year-old adolescents, and I do not know whether public health services are prepared to receive and treat these patients as needed.

Jaime Cury: One cannot say that there is no survey on fluorosis in Brazil, since this information from the SB2010, a national survey on caries in Brazil, is widely available on the Ministry of Health's

website. I also addressed the discussions about more severe staining, which is rarely observed. According to this national survey in Brazil, 11% of the population have very mild fluorosis. Quality of life scores are not investigated for children aged 3 to 6 years of age, but they are for adolescents, who are in a stage of self-perception and are concerned about the social aspect. There is another important factor: We are discussing dentifrices. Are you sure this fluorosis is related to dentifrice? Where there is fluoridated water, the biological effect of fluoridated water is fluorosis. Another important aspect of fluoridated water is caries reduction. In cities with fluoridated water without fluorosis, either the person does not drink the water or the concentration is not within optimal levels. Somehow, what has happened in Brazil is that people have forgotten that fluoride at optimal levels can cause mild or very mild fluorosis. All discoveries about the effect of fluoride in preventing dental caries have been related to fluorosis occurring naturally from fluoride. In developed countries without fluoridated water, fluorosis is not perceptible.

Joana Carvalho: There are mild fluorosis levels in countries that only have fluoridated dentifrice. What happens in reference clinics, as reported, is a bias related to referred cases, but the prevalence is low. Since a specialized clinic is necessary to solve this problem, we have the impression that there is a significant occurrence.

Marisa Maltz: We have investigated the prevalence of fluorosis at 12 years of age in Porto Alegre and basically observed levels 1 and 2, and analysis of the quality of life at 12 years of age reveals no influence from fluorosis.

Jaime Cury: We should not confuse the prevalence of fluorosis with the severity of fluorosis. The prevalence of fluorosis in individuals drinking fluoridated water is nearly 40%. This is a high prevalence, yet how significant is this with regard to severity? A total of 11% have mild or very mild fluorosis, which does not affect the quality of health. This is the important discussion: prevalence and severity are parallel aspects.

Laura Feuerwerker: Recalling the presentation of Prof. Paulo Capel, I would say that, in a country like Brazil, access to oral health care has improved,

but it is still deficient. Thus, I consider that the effect of water fluoridation on a population with low access to oral health services is unquestionable. The positive effect is greater than any side effect, which is ultimately esthetic, despite the importance it may have. This is an important aspect to be considered.

Primary care and health care

Lilian Marly de Paula: I have a question for Prof. Laura Feuerwerker. In your lecture, you addressed the importance of multidisciplinary cooperation in basic care and I would like to know your opinion about the separation between the oral health team and the family health team, if this causes any difficulty in service planning and delivery.

Laura Feuerwerker: There is a separation, because the oral health team was included later in the Family Health Strategy. After establishment of the *Brasil Sorridente* program, there was a stimulus and then the oral health teams were effectively included in the Family Health Strategy. There are still difficulties in terms of integration.

Participant: The community health agents of Sorocaba were trained to provide toothbrushing instructions in the houses they visited. After being hired by public selection, they no longer received the health risk premium, so they refused to provide toothbrushing instructions, which included the use of gloves and a mask. The project was interrupted and I would like to ask you for some guidance in this respect.

Laura Feuerwerker: Just providing toothbrushing instructions is not a health risk activity. In general, health units have toothbrushing rooms and this activity is commonly developed in day-care centers and schools. Some myths have arisen around several subjects. There is no reason to receive an extra health risk payment for performing this activity, and in general there are no hindrances. Managers must work to overcome some fallacies, beyond the quarrels between different professional categories.

Risk factors for oral clefts

Marisa Maltz: Prof. Vera Lopes, what is your experience concerning public compliance in avoiding teratogens in genetic counseling?

Vera Lopes: Genetic counseling is an individual matter, thus patients coming to us already have a family history and counseling is 100% effective for the second pregnancy. The only exception, described in a Canadian study, refers to a patient with a recurrence of children with fetal alcohol syndrome due to the cultural habit of drinking because of the cold weather. In Canada, when fetal alcohol syndrome is detected in the first pregnancy, the woman is hospitalized during the second pregnancy. From a population standpoint, there is still a lack of knowledge among health professionals regarding teratogenic agents or late detection of pregnancy. Regardless of whether they address cancer or dental caries, there is lack of awareness campaigns focused on health strategies, targeted to the population at risk rather than particular diseases.

Oral cancer

Marisa Maltz: We will now address a new subject, beginning with the questions addressed to Prof. Cesar Migliorati. Do you have any experience with toluidine blue as a tool for the early diagnosis of oral cancer? What do you think about this strategy in the public sector?

Cesar Migliorati: Toluidine blue is a vital stain that presents an affinity with nucleic acids and cells that are dividing rapidly. Therefore, toluidine blue has been used for detection of active lesions for many years, especially in gynecology and obstetrics. This technique was introduced for use in the mouth to allow detection of lesions that could be potentially malignant. We have been using toluidine blue for many years. It should be remembered that when patients are screened by rinsing with toluidine blue, many non-specific areas may be stained, which may lead to an unneeded, more invasive treatment like a biopsy. Clinical evaluation is necessary first, which may then be complemented using toluidine blue. For example, if a 1% aqueous solution of toluidine blue is applied to the tongue dorsum, it will stain the entire tongue even though there is no lesion, because the papillae are active and multiplying, thus the stain is fixated in these areas. Toluidine blue is a very important tool provided it is not used as a substitute for clinical evaluation of lesions. For

example, it may be very important when a patient presents several areas with white or red lesions or a combination of both, and the most representative area of the lesion must be selected for a biopsy and histopathological analysis. Toluidine blue may be used to differentiate active and arrested lesions. In the public sector, it may be used just as in private practice. When a suspicious lesion is found, this lesion is evaluated and the stain may be used to determine if there is any area with greater activity.

Fabricio Bitu: Concerning toluidine blue, the ideal in public health would be to have a well-trained professional identify the clinical aspects. If I assign the responsibility of diagnosis to a substance, from the public sector standpoint, some researchers may claim that there may be false-positive results.

Marisa Maltz: Dr. Lucas Zago, there is a question for you about the utilization of fluorescence photography for the early diagnosis of cancer.

Lucas Zago: I agree with Prof. Cesar Migliorati concerning the use of toluidine blue. Fluorescence photography is also an auxiliary tool that should be correctly used to avoid a great number of false-positive outcomes. In fact, we are developing a prototype based on methodologies of fluorescence microscopy diagnosis, adapting the flash of conventional cameras for use in clinical practice. This is still under development, in a partnership between the University of Greece, the University of Australia and the Federal University of Uberlândia. We intend to develop a simple, low-cost tool for fluorescence capture and enhance communication with the pathology laboratory and communication between professionals. The second stage would be the development of some marker for utilization in these lesions, to increase the emission of fluorescence. The goal is to increase the possibility of reaching a diagnosis, especially an early diagnosis.

Marisa Maltz: When someone says that there were great advances in the early detection of cancer, how did they occur? Were they related to professional training and active search by the patients?

Cesar Migliorati: The education of dental professionals and undergraduate students is very important for early detection of oral cancer. In colleges, we teach students that, during examination,

the patient must be screened for lesions with malignant potential. All walls of the oral cavity can be evaluated in one minute, searching for alterations in color, volume, or ulceration. This becomes a routine examination. After examination, the patient must be informed that screening for oral cancer was performed and that there are no suspicious lesions, then the following treatment step is initiated. The greatest problem, which is a reason for criticism of dental professionals, is that patients arrive with undetected cancer lesions in advanced stages. The patient was not taught to seek help early and only goes to a dental clinic when lesions are advanced. The dentist can detect the lesion when seeing it, but can do nothing if the patient is not examined in a timely fashion. The patient is afraid of cancer, and this is a cultural problem. Patients have a problem anticipating a certain social discrimination. They worry that they may have some severe disease, and they hide this to avoid having anyone find out about the problem, about the “disease.” People do not even say the word “cancer.” Great improvements are needed in public health education about cancer and precancerous lesions. In the U.S. there are aggressive campaigns for smokers and alcoholics that have had head and neck cancer and currently have deformities as a consequence of treatment of these lesions. People who had smoked and had their legs amputated now say “when everybody told me I should not smoke I did not believe it, now I see what happened to me.” Public education work is necessary, so that people will not be afraid and will seek out a dentist if there is any alteration.

Fabricio Bitu: Concerning diagnosis, it should be remembered that patients are cancer-phobic, yet some professionals also disregard this aspect. There are a number of causes of this problem, such as difficult access to treatment in Brazil. For poor patients, with difficult access to services, who smoke and drink, the advice to stop smoking will not be effective. We must learn how to talk to patients in a way that allows them to understand. The prevention of cancer in Brazil requires improvement of professional capacity, understanding that the clinical aspect will prevail, learning how to differentiate the evolution of benign and malignant lesions. By do-

ing this, we will not depend on a substance or a sophisticated diagnostic method, considering the easy access to the mouth, as opposed to the stomach or lung cancer. It is important to change this posture from the standpoint of patient access, as well as professionals' perception.

Joana Carvalho: In Belgium we do not have a campaign, yet during anamnesis or a dialogue interview, one of the questions addresses smoking or use of any other drug. At this time, we talk about smoking and the oral cavity.

Efigênia Ferreira e Ferreira: Concerning this causality and what we, as dental professionals, do to reach the population, the first aspect to consider is that this will fail if we do not start to work collectively on vulnerability, rather than individually. The second aspect is the need to enhance the studies on causality. In the 2012 Conference on Social Determination, Prof. Jaime Breilh asked why the relationship between pesticides and cancer has not yet been investigated. Lately we have been noticing cases of oral cancer not associated with certain causes, namely alcohol and smoking. Further studies on causality are necessary.

Marina Gallottinni: In relation to squamous cell epidermoid carcinoma, it is known that the etiologic agent is smoking and the promoting agent is alcohol, thus it is very easy to prevent from a theoretical standpoint. The Dental School of the University of São Paulo is sponsoring an antismoking campaign conducted by dental students focused on esthetics, which is a weak point of patients. I don't understand why we are unable to establish antismoking campaigns in universities. The government used to offer treatment based on antidepressants. Does anyone have experience with antismoking campaigns in universities?

Participant: We currently have a program of the Ministry of Health associated with the National Cancer Institute (INCA), an antismoking program in the cities, with cognitive work and the use of prescription drugs offered by the Brazilian Public Health System (SUS), as conducted in the state of Minas Gerais. The medical doctor of the Family Health Strategy prescribes the drugs and the team work is done in the cities. Concerning cancer pre-

vention, since having completed my undergraduate course, I take care to examine not only the teeth, but the entire mouth. Patients come in with advanced stages of disease, but they may have gone to a dentist that did not see it. It is very rewarding to work with prevention, but there is lack of training for dentists to see patients beyond their teeth.

Laura Feuerwerker: The SUS has been continuing the antismoking campaign. It is important to have resources to help people stop smoking, yet I think it is important to avoid blaming the user. Scaring people can have adverse effects, because they usually smoke and use alcohol or illicit drugs for more complex reasons. It should also be highlighted that, despite the very high association, they are not single-cause relationships. We have been able to strongly reduce smoking with measures that control company advertising and several other initiatives that are not directed only to the individual user. It is important to understand that there are associated factors, such as access to health services or the type of care received. Concerning other health professionals, with the intensification of technological advances, there has been a deterioration in the relationship of health workers with users in recent years. For example, medical doctors are more focused on examinations and procedures than on building a relationship with the user. This includes the fact that professionals often do not even look at patients or talk with them. This may be related to the fact that dentists do not look at the mouth and talk, which is very important in other professions.

Participant: I work in the Health Secretariat and would like to highlight the SUS program. In Bauru, we have important experience in preventing the use of tobacco and an antismoking program offering services of cancer prevention and counseling, a multidisciplinary program with participation of two dentists to support this health network. A recent regulation of the Ministry of Health reinforces this attention to chronic-degenerative diseases addressing tobacco and expanding this action to the basic health network.

Efigênia Ferreira e Ferreira: I have been following the INCA data and have observed an increased incidence of oral cancer every year. I would

like to ask the pathologists if they know of the reasons for this increased incidence, since we are talking about smoking and alcohol. I do not have data on alcohol, but smoking in the last 10 years decreased from 35% to 17%. What is currently considered the most plausible causality?

Cesar Migliorati: In fact, U.S. and European statistics indicate that the number of cases of oral cancer has been stable and has begun to decline as a result of the work conducted over recent years. Now there is an epidemic of oropharynx cancer associated with HPV, which is independent of the use of tobacco and alcohol. This disease is sexually transmitted through oral sex. Professionals must discuss this with patients, but they are not trained for this. The professional must offer counseling. It is important to have an overall perspective, since the patient must be educated to behave just like women who prevent breast cancer by doing palpation and going regularly to a doctor. This type of global awareness is necessary. The work with students in dental schools aiming to create the habit of examining the oral cavity raises professional awareness of this issue. We have been discussing the relationship between the professional and patient, an aspect that is not taught at school, but rather learned in practical life; how to inform patients that they have a sexually transmitted disease in their mouths and then explain what they need to do. We are addressing several aspects, not only the focus of dentists knowing how to detect a malignant lesion.

Marina Gallottinni: It should be mentioned that some epidemiological surveys consider lip cancer and the aspect of sun exposure, which is a great problem in Brazil. People are not very diligent in using sunscreen, especially men, who believe they are using lipstick. This is a cultural problem. The question of HPV as an etiologic agent is still discussed in the literature, and more than 120 types of HPV have been detected so far. In my opinion, HPV is an oncovirus. It is a great villain for cervical cancer. It is also associated with the oropharynx. Currently, the molecular techniques to detect the HPV

are more sensitive, thus the oncovirus is detected in lesions in which it was already present. I do not know to what extent oral sex is responsible for the increased incidence of oropharynx cancer. Smoking is the carcinogenic agent, combined with genetic predisposition.

Fabricio Bitu: In a general evaluation of carcinogenic factors, as well as diet and stress, we have to keep in mind that in the mouth there is a very significant relationship between sun radiation on the lips and smoking combined with alcohol and oral cancer. Some studies demonstrate an increase in the incidence of smoking and consequently of cancer. In previous years, there was underreporting in the registries of INCA. After the establishment of programs in Brazilian states, the reporting rates will increase, because dentists are performing more diagnoses. There might not be much evidence of oral epidermoid cancer associated with HPV, which is stronger for oropharynx cancer, and I agree with Prof. Cesar Migliorati on the importance of the clinical approach with regard to oral sex.

Participant: I would like to pose a question for Prof. Fabricio Bitu. Would screening be effective in reducing mortality due to oral cancer?

Fabricio Bitu: The objective of screening is to reduce the number of cases, but unfortunately our reality is so deficient concerning diagnosis that screening plays the role of organizing the structure of the network, for later performance of studies. In Ceará, the number of cases increased, because previously there was underreporting. Only 22% of professionals in the Family Health Strategy made correct diagnoses. Screening is not tracking, it is organizing a new professional structure for the dentist. The ability to educate professionals and students to treat the patient, and not the tooth, is what is most important.

Nilce Tomita: On behalf of ABOPREV, I would like to thank all the panelists for their participation, which enhanced our event, and for having interacted with the audience during this master symposium, answering their questions.