

# Parents' perception of psychosocial factors, health-compromising behaviours and oral health among adolescents in South Africa.



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Okagbare TE,<sup>1</sup> Naidoo S.<sup>2</sup>

## SUMMARY

### Introduction

Parents' perception of psychosocial factors associated with health-compromising behaviours is critical with respect to parental participation in the prevention and control of these problems.

### Aims and Objectives

The aims and objectives of the present study were to explore the knowledge of parents regarding five health-compromising behaviours: alcohol consumption, smoking, inadequate consumption of fruit and vegetables, inappropriate consumption of refined sugars and inadequate/infrequent tooth-brushing. Their understanding of how the psychosocial factors of educational aspirations, religiosity, self-esteem and sense of coherence (propensity to cope with stress) influence these behaviours were assessed.

### Design

The study design was qualitative and exploratory and the research strategy was inductive, deductive and abductive.

### Methods

A non-probability purposive theoretical sampling method was employed and data were collected from five focus group interviews. Data were analysed using the grounded theory approach.

### Results

The emergent substantive theory was "Mitigating adolescents' unhealthy behaviours: Tame the taste buds and train the child positively from infancy through preadolescence".

### Conclusions

Grounded theory brought to the fore the need for parents to make conscious efforts to properly train their children from infancy through preadolescence with positive adolescent health-outcome expectancy.

## INTRODUCTION

1. **Tuweyre Erherhebie Okagbare**, *BDS, PG Dip.* (Odont), *MSc* (Odont), *PhD*. Department of Dental Public Health, Faculty of Dentistry, University of the Western Cape
2. **Sudeshni Naidoo**, *BDS* (Lon), *LDS.RCS* (Eng), *MDPH* (Lon), *DDPH.RCS* (Eng), *MChD* (UWC), *PhD* (SU), *Dip Int Research Ethics* (UCT), *DSc* (UWC). Emeritus Professor, Faculty of Dentistry, University of the Western Cape

### Corresponding author

**TE Okagbare**, Faculty of Dentistry, University of the Western Cape, South Africa, Private Bag X1, Bellville 7535, South Africa. Cell No: +26653031980 Email: teokagbare@gmail.com

## KEY WORDS

Qualitative research, Adolescents, Psychosocial factors, Health-compromising behaviours, Parents' perceptions, Oral health, South Africa

There are few published studies on the psychosocial factors associated with health-compromising behaviours among adolescents in the African region. Some studies focused on a single behaviour,<sup>1</sup> others on multiple health-related behaviours, but none have addressed the perceptions of parents regarding unhealthy behaviours. There is also little research on the religious coping mechanisms that are used by adolescents and whether race has any influence in shaping coping mechanisms. Furthermore, in recent public health approaches, health promotion research has moved away from studies on the association between diseases and their risk factors to the association between the psychosocial determinants (the root causes of the causes) of diseases and their risk factors.<sup>2</sup>

Much research has been conducted on the roles of peer pressure, socioeconomic factors<sup>3</sup> and demographic characteristics associated with unhealthy behaviours.<sup>4</sup> However, research has found that socioeconomic factors (education and household income) and peer pressure alone do not fully explain health-related behaviours and the inequalities in oral/general health in most adolescent populations.<sup>5</sup>

In addition, studies on marital status have identified that being a single parent and/or divorced has substantial negative effects on the well-being of adolescents.<sup>6-7</sup> This is so in South Africa, where women head nearly half of all the households.<sup>8</sup> Moreover, adolescents from intact families whose parents lack the appropriate skills in parenting also engage in health-compromising behaviours. Marital status as well as socio-economic status or positioning should therefore not be a hindrance or a yardstick in the nurturing of adolescents in health-enhancing behaviours. Every parent/caregiver should be empowered with the necessary skills and strategies that are effective in their circumstances to create an enabling environment for their adolescent children to develop healthy behaviours. Furthermore, apart from the associated poor oral health, adolescent unhealthy behaviours may have serious general health implications such as future obesity, diabetes and cardiovascular disease.<sup>9</sup>

The role of an adolescent's self-esteem, self-efficacy,<sup>10</sup> religiosity, sense of coherence (SOC) and mastery over relative economic and social positioning among others are important in resisting negative peer pressure<sup>11</sup> and may provide further explanations for observed oral/general health inequalities and health-related behaviours.

The aforementioned factors appear to be linked to parental perception of these factors as they relate to their adolescents' oral health.<sup>12</sup> It is imperative therefore, for the present study to explore the perceptions of parents of the psychosocial factors that are associated with these health-compromising behaviours.

## METHODS

### Study design and sampling procedure

The design for this study was qualitative and exploratory and the research strategy was inductive, deductive and abductive. A non-probability purposive theoretical sampling method was used.

### Profile of the study participants

The sample size of 37 was determined by theoretical saturation. The group of 37 included 23 fathers, one grandfather; 10 mothers and 3 grandmothers. Thirteen had tertiary education, 14 some high school education and 10 less than high school education. The recruitment yielded 25 Blacks, seven Coloured, three Indians and two Whites. Thirty church attendees and seven Muslims were among the participants.

The participants were aged between 28 and 75 years. Each of the five focus groups (minimum of six participants per group) was homogeneous in the sense of shared living experience but diverse in terms of professions. Although no attempt was made to achieve a provincially representative sample, the study endeavoured to accommodate participation from both the semi-rural (Katlehong in East Rand/Ekurhuleni Municipality and Soweto in Johannesburg Municipality) and urban/metropolitan settings (Alberton in East Rand/Ekurhuleni Municipality, Hillbrow in Johannesburg Municipality and Gezina in Tshwane Municipality) in order to ensure that the data were not skewed. It was also for this reason that members of the four racial groupings in South Africa (Black, Coloured, Asian/Indian and White) were recruited and the views of the two largest global religious movements (Christianity and Islam) obtained. This was therefore, a double-layer design, which included geographic areas as the first layer and different audiences as the second layer.

### Data collection

The interviews of the five focus group participants who met the criterion for the study, which was being a past/current parent or caregiver to an adolescent, were conducted between the months of March and November 2015. After informed consent was obtained, each participant was requested to complete a short questionnaire on demographic characteristics. A semi-structured guiding questions schedule, which was developed to ensure consistency in data collection, was used, while allowing for the sessions to be flexible in order to optimize the natural flow of conversation in the groups. The interview guide included a series of open-ended questions to reduce the chance of priming and bias, allowing the participants to express themselves without reservation. The questions were designed to elicit discussion among participants regarding the psychosocial factors they perceived to be associated with the health-compromising behaviours of alcohol consumption, tobacco use, inadequate consumption of fruit and non-starchy vegetables, inappropriate consumption of refined sugars and inadequate/infrequent tooth-brushing related to oral health among adolescents in South Africa. The language of a layperson was used to reduce any likelihood of inhibition. The participants were exhorted to take turns to respond to questions to ensure that each participant had an equal opportunity to contribute. The venue of each focus group interview was accessible and acceptable to all the participants. The average length of the five focus group interviews was 1 hour 45 minutes due to the nature of the topics and participants.

### Data analysis

The data analysis of this study used the grounded theory methodology. It involved the analysis of the transcripts using the Open (Substantive) and Axial Simultaneous Coding method (First and Second Cycle coding processes) and was employed from the Initial Coding to integrated data analysis. This was then followed by Selective and Theoretical coding (putting the concepts into a

theoretical framework) in order to suggest a substantive grounded theory.<sup>13-15</sup> An independent coder, a specialist of Community Dentistry was also engaged to reduce bias.

### Ethical considerations

This study protocol was subject to review and approval by the Senate Research Ethics Committee of the University of the Western Cape, South Africa (Ref No. 11/1/55). Pseudonyms were used to protect the identities of participants who were given information about the study and shown the ethical approval for the study. They then read and signed the informed consent forms after the purpose of the study had been explained clearly by the researchers and understood by the participants.<sup>16</sup> Permission was obtained at the commencement of every interview from each participant for the use of an audio recorder. They were also informed that their participation in the interview was entirely voluntary, that anyone may refuse to answer any question and that anyone may withdraw from the interview at any time without question or consequences.

## RESULTS

The results of the data analysis, derived using the grounded theory methodology, were articulated in two inter-related substantive categories that in turn explained the core category and core concerns of the participants which were given expression in terms of the following two metaphoric concepts:

1. Engendering the development of healthy behaviours from infancy
2. Providing enabling environments and reinforcement for the retention of healthy behaviours from early childhood through preadolescence

The following excerpts from the contributions of the study participants illustrate these two metaphoric concepts:

"Nobody takes the child and shows them how to do brush in circles, how to brush at the back. They watch somebody doing it and they think okay, oh that's what you do."

"The best thing is if they are trained from small. If they don't know what sugar taste like, they won't miss it. And if the child is trained to eat healthy things it is not bad or is not non tasty because that's all the child knows. But once you expose the child to the other side then you will see, quickly, the veggies will go away (laughter)."

"Ok, I think that obviously if a child that has been taught to look after themselves, then they will eat healthy and have all those good habits and a greater self-esteem...will practice good behaviours."

"Charity begins at home. The way you train your child is the way you will find him outside."

"So something must be done early because I think in my culture we must just tame it when it is still young."

The participants unanimously acknowledged that parents' realization and ability to tame the taste buds of their growing infants, train and nurture their mindsets (indoctrination) through early childhood and preadolescence were crucial in the development and retention of health-enhancing behaviours into adolescence, especially with the provision of an enabling environment and the required support structures at home.

Two substantive categories were identified:

- i. Adolescent identity crisis as illustrated by the following excerpts from the participants:

"Yes, adolescence, I will say is the...the wild years of ... any human being."

"You are still a child, but you want to be like an adult hence, you end up making wrong decisions and being disrespectful and all that."

"Oftentimes it is peer pressure actually, for them to get involve in unhealthy behaviours, whatever, that might mean to them, be it smoking, be it taking drugs, be it drinking, partying, usually it is peer pressure. Because their friends are doing it, they also want to do it."

"I think you know, most kids they like to experiment. You know they see somebody doing this and they say ok let me try it."

"Adolescents are very rebellious and...they don't care about anyone, anything. They just want what they want..."

The consensus of the participants was that adolescence could be described as the 'wild years' when a child thinks he or she is an adult and engages in a lot of experimenting, succumbs easily to peer pressure, tends to be rebellious, loves flouting authority and lies to get permission or approval for the 'bad' things he or she does.

ii. Adolescents' unhealthy behaviours and potential modifiers are illustrated by the following:

"Yes, it would be kind of imitation because they want to imitate you smoking...they start smoking, then it became a habit...cannot pull yourself out of it."

"Adolescents prefer doing a lot sugary stuff, they love to eat sweets and ice creams... and other sweet things."

"These days kids don't like vegetables – they don't like it. They hate it."

"I think they don't worry about brushing...adolescents, they don't brush properly because of laziness..."

As illustrated in the excerpts above, the study participants identified alcohol consumption, tobacco use, excessive consumption of refined sugars, inadequate consumption of fruit and vegetables and inadequate oral care as their major concerns with regard to adolescent unhealthy behaviours that affected oral health.

"The children that are academically ambitious are focused and aware of the dangers, so they don't allow themselves to be sucked in to these dangerous things. They focus on studies and career... Other kids are living for today, day by day."

"Religion, it depends on what religion you are involved in because there are many religions and some might even promote smoking. So to say that religion can be a good influence, it depends on what religion it is."

"The only thing I want to say is that self-esteem enables an adolescent to have the ability to do what he feels is right and not what he feels is wrong and be able to overcome his inclinations and basically goes from reaction, do thing rationally instead of emotionally."

"If the adolescent cannot cope with the stress may be the unhealthy behaviours will be used as a bulwark against the stress."

The study participants indicated that academic ambition, self-esteem and propensity to cope with stress protect adolescents against unhealthy and risky behaviours while the influence of religion was debatable. Other potential modifiers identified are illustrated in the excerpts below:

"Different race groups eat different things...we are all from the same country, we are born here but everybody eat differently... because of the culture and the race you come from."

"Look, if the parents are not the examples, kids learn by what they see more than what you tell them. You tell them don't drink and don't smoke but you drinking and smoking. Let me tell you, they are going to follow what they see and not what they hear."

"Somebody with a proper upbringing has got a good support

around him or her. So by the time you reach your adolescent age you would have formed certain behavioural patterns that will help you recognize unhealthy behaviours."

"You, see we can try to teach healthy things at home ...but outside, when they at school they are eating chocolates, eating snacks...."

"I think the young ones, they get bad habits because it is advertised everywhere. You see it in billboards...so they think is a good because it is being advertised everywhere."

"Unhealthy stuff is freely available number one....so they don't even need to be influenced. ...Open the fridge and you find carbonated sugar drinks...open the cupboard there are sweets and biscuits. So as parents we promote it by buying these things and make it available. There are no restrictions on unhealthy foods, you can buy what you want and nobody will stop you."

"I think we must look at affordability...it may be is all about priorities. Some people rather buy clothes and other things than fruit...they say it is expensive. But if you compare fruit and a pair of shoes, they will rather buy a pair shoes."

"Adolescents want to sleep a lot. I know. I've got two daughters... everything is last minute -run to the bathroom, jump in the shower, use the toothbrush...everybody has a hectic lifestyle. They don't take enough time to brush their teeth and also to brush correctly."

"Nobody takes the child and shows them how to do brush in circles, how to brush at the back. They watch somebody doing it and they think ok, oh that's what you do."

Adolescents' race/culture, parents as role models/their unhealthy behaviours, adolescent upbringing/home environment, neighbourhood/society and schools, advertisements, marketing, negative mass and social media, availability and affordability of unhealthy products were all cited as contributing factors to adolescents' unhealthy behaviours as indicated above.

Mitigating adolescent unhealthy behaviours

"Parents need to know first. Not every parent knows what is good, what is bad and what is right. A lot of parents teach children exactly what they know and a lot of time what they know is not the right thing. It all comes down to giving the right advice."

"And when they need help they should ask, even if we need to seek professional help, we must provide as much help as we can afford as a family. We will stand by them and then not judge ...give them the opportunity to be able to overcome any issues."

"Quality time and yes, parent should spend quality time with their kids... that is very important."

"When you are a parent you need to let your kids be free with you. They must tell you everything, their problems...it is helpful for them."

"I think that it is important that we have a relationship that is open, that is not too authoritarian because it gives opportunity for children to open up to you and to let you know the troubles and problems that they might be having."

"I think you need all the help that you can get ...it takes a village, the schools, a community to raise a child."

Parental control, permissiveness and over-indulgence of adolescents were cited by participants as contributing factors to adolescents' unhealthy behaviours. Parents were expected to be knowledgeable about unhealthy behaviours and to provide the right parent-child relationship and an enabling environment for the development and retention of health-enhancing behaviours. Relationships should not be too authoritarian but close and good enough for the adolescents to trust their parents, be open to them and to listen and be receptive when their parents try to educate them instead of going to outsiders. A parent could not do this alone

- they need one another, professionals and other institutions such as the schools, governmental and non-governmental organisations.

Challenges faced by parents of adolescents

"With me raising my children by myself...they don't listen. They know everything."

"Once they leave your house, you basically have got no control. The decisions they make should be based on how they were trained at home but you've got no control..."

"The media is a big problem, social media."

"There are many challenges, the biggest challenge is that, we don't know what they want or we don't understand them anymore."

"They are exposed to too much, even the ones that have been brought up well ... still get tempted because there are so many unhealthy behaviours ... They are easily influenced, so the challenges are unbelievable."

The participants stated the challenges they faced were many and daunting. These included peer pressure, the negative influence of mass and social media, the child rights law of the South African government and adolescents who did not listen to adults. Parents did not understand their adolescents, did not know what they wanted, they grew up too fast and they had their preferences which often clashed with what their parents thought was right for them. Once they left the home, parents could not protect them from bad influences. The emergent substantive theory generated from the data of this study was "Mitigating adolescents' unhealthy behaviours: Tame the taste buds and train the child positively from infancy through preadolescence"

## DISCUSSION

Consistent with the observations generally reported in adolescent literature<sup>17</sup> the parents in this study regarded the adolescent period as the 'wild years' when children think they are sufficiently mature to make informed decisions regarding their future, often undermining parental roles and frequently making wrong decisions. The parents indicated that adolescents see themselves as adults and as a result are disrespectful. They emulate things that adults do but are still children. The participants also expressed the opinion that adolescents succumb easily to peer pressure because they prefer to be socially acceptable among friends and peers; they also like experimenting and have the tendency to imitate unhealthy behaviours they consider "cool". The consensus of the parents was that adolescents are impatient, rebellious, selfish and stubborn. They indicated that it is in the character of adolescents to be mischievous or naughty, to try to outdo their parents and that they may lie to get permission or approval for forbidden activities. An experimental study conducted in 2008 considered how peer pressure had a dominant influence on the adoption of potentially harmful habits by impressionable adolescents, youths and young adults.<sup>11</sup> The group of 306 individuals revealed that with advancing age the tendency to take risks diminished, that the group tended to focus on the benefits rather than the risks and that amongst adolescents the effects of peer pressure were greatest.

The parents expressed concern and displeasure over adolescents using money to buy alcohol as a means of escaping from the realities of life instead of buying healthy foods. This concern among parents in Gauteng Province is a reflection of the reality of their daily lives. The Second South African National Youth Risk Behaviour Survey of 2008 reported that the proportion of adolescents who have ever used alcohol in Gauteng Province was 65.1% compared to the national average figure of 49.6%, while 11.9% of adolescents reported having had their first alcoholic drink before the age of 13 years.<sup>18</sup>

With regard to tobacco use, parents asserted that adolescents probably start smoking by imitating those who smoke and/or by experimenting with cigarettes. They later become addicted or unwilling to stop smoking. The Centre for Disease Control

and Prevention<sup>19</sup> has reported that most adult smokers started experimenting with cigarettes or began smoking as adolescents. Imitation is most likely to be out of curiosity, because curiosity is a significant characteristic of adolescent development that frequently expresses itself in ways which will incur disapproval. Other probable reasons why adolescents imitate those who smoke are the various attractions such as its perceived association with maturity, glamour and friendship, as well as the seeming pleasure it offers those who overcome the initial revulsion of the body to the pharmacological effects of cigarette smoke. Adolescents' unwillingness to stop tobacco use is possibly due to addiction to nicotine, especially when reinforced by easy availability of cigarettes, perceived positive associations and the belief that stopping the habit is extremely difficult.<sup>20</sup>

Many parents also expressed concern regarding the inappropriate consumption of refined sugars by adolescents. It is plausible that this inappropriate consumption of refined sugars is likely lead to high prevalence of caries and obesity among adolescents in South Africa.<sup>21</sup>

The parents ascribed adolescent inadequate oral care to laziness and tooth-brushing in a hurry due to lack of time, which resulted from waking up late in the morning after overindulgence in video games and television viewing among other factors. The parents also lamented that nobody spent time to teach or train them how to brush their teeth properly when they themselves were young. However, it has been suggested that adolescents' psychological predisposition and family environment are likely to significantly influence their tooth-brushing behaviour.<sup>22-23</sup> The question of the opinions of parents on how to promote good oral health was investigated in a study conducted in The Netherlands. Relying on interviews with six focus groups the study came to conclusions which would be supported by all interested in Oral Health Promotion, namely to provide clear education on oral health, to ensure early referral for dental treatment, to monitor school diet arrangements and to encourage parental support. Participating in the study were groups from the Dutch population, and the Turkish and Moroccan immigrant groups, so agreement between these parents reinforces the recommendations.

It is pertinent to emphasise that brushing teeth after eating sugary food may not entirely prevent the harmful effects, although prolonged exposure to an acidic environment will certainly be reduced. Rather, it is better to brush before a sugary meal or snack to remove plaque, reduce the bacteria and hence the quantity of acid production.<sup>24</sup> Brushing thoroughly twice a day with fluoridated dentifrice is an important oral self-care activity known to be associated with lower risk of dental caries<sup>25</sup> and periodontal disease.<sup>26</sup> However, adequate removal of dental plaque has more to do with the quality of brushing rather than its frequency.<sup>27</sup>

The parents indicated that academic ambition, self-esteem and propensity to cope with stress (FOC) protect adolescents against unhealthy and risky behaviours while the influence of religion was debatable. The role of academic ambition may be explained by one's ability and motivation to work hard to attain goals including higher education or a healthier body. On the other hand, low educational aspiration is associated with health-compromising behaviours such as inadequate/infrequent tooth-brushing.<sup>28</sup> A Scandinavian study involving over 9000 respondents found a strong association between erratic tooth brushing frequency and other health-compromising activities.<sup>28</sup> Adolescents without self-esteem are likely to be influenced easily, and to easily give in to peer pressure. They may do things they do not want to do, trying to please others or trying to fit in. The parents also stated that some adolescents do unhealthy things such as smoking cigarettes and taking drugs to prop up their self-esteem. The parents' position is in agreement with the findings of a systematic review study which showed high self-esteem to be positively associated with eating healthily, being a non-smoker, and having low alcohol use.<sup>29</sup> That study went further to recommend school programmes to encourage learners to develop the preferred approach to develop self esteem without relying on unhealthy "props".

Alamian and Paradis<sup>30</sup> also assert that adolescents with high self-esteem are less likely to have multiple behavioural risk factors. Conceivably, adolescents who have low self-esteem are less likely to brush for cosmetic reasons as they already have a negative perception of their self-image.<sup>31</sup> The parents were also in agreement that SOC protects adolescents against unhealthy behaviours because most of the adolescents use unhealthy behaviours as coping mechanisms or as bulwarks against stress, although some adolescents who can cope with stress indulge in unhealthy behaviours such as smoking cigarettes because it is a popular social activity. This sentiment expressed by parents in our study is consistent with the findings of other research that reported significant association between SOC and health behaviours such as alcohol consumption,<sup>32</sup> dietary habits,<sup>33</sup> smoking cigarettes<sup>34</sup> and quality/frequency of tooth-brushing. Parental dependence on nicotine was found in a retrospective study in the United States to be strongly associated with the development of dependence amongst family adolescents.<sup>34</sup> The statistics were derived from the National Survey on Drug Use and Health, 2004 to 2012. It was found that race and ethnicity did not influence the relationship between parent usage and offspring usage. It may be of pertinence that in the current study, the parents also argued that apart from races eating differently, they did not perceive race as a dominant influence on an adolescent's attitude towards unhealthy behaviours. A dominant factor that the groups all agreed on was that unhealthy behaviours of the parents have significant effects on their adolescents' tendency towards such unhealthy behaviours, because parents are powerful role models and their children emulate them as they grow up to be adults.<sup>35-36</sup> The parents were also unanimous regarding the role of upbringing and the home environment among adolescents in the formation and retention of healthy behaviours such as the consumption of fruit/vegetables and unprocessed natural foods in place of the consumption of processed and refined foods. The provision of an enabling environment for the development and retention of health-enhancing behaviours cannot be over-emphasised. The significant influence of neighbourhoods, societies and schools on the adolescent attitude towards unhealthy behaviours, which could be either negative or positive, was mentioned too. On the negative side, for example, this observation was similar to the finding of another study that reported that children from immigrant Mexican households abandoned traditional foods prepared at home in favour of the higher-calorie foods, beverages and snacks available at school.<sup>37</sup>

Parents held the view that advertisements on billboards, television, newspapers and other media, which showed unhealthy behaviours, exerted an enormous influence on adolescents. Exposure to food-related television advertisements has been found to produce alterations in belief systems as to the desirability of foods high in calories and low in nutrient density.<sup>38</sup> One study pointed out that commercials advertising healthy food make up only 4% of the food advertisements shown during children's viewing time.<sup>39</sup> Another report cited television advertising as influencing adolescents to adopt unhealthy lifestyle choices such as and cigarettes and alcoholic<sup>40</sup> although not all television programmes were considered to be bad.

Negative mass and social media influence via the Internet was also reported by parents as a significant factor driving adolescents' unhealthy behaviours. This was consistent with the finding of Donahue, Haskins and Nightingale<sup>41</sup> which indicated that parents were concerned about their adolescent children drowning in media messages, especially in respect of negative health behaviours that threaten their health and well-being, because adolescent media use has exploded. In Canada for example, the average adolescent by the stage of his/her high school graduation will have spent more time watching television than in the classroom.<sup>42</sup> Furthermore, Villani<sup>43</sup> asserted that the primary effects of media exposure on adolescents were increased high-risk behaviours, including alcohol and tobacco use. A study suggested that advertising increases beer consumption<sup>44</sup> and in countries such as Sweden, a ban on alcohol advertising led to a decline in alcohol consumption.<sup>45</sup> In South Africa the recent promulgations banning smoking in public places has proved a successful and well received regulation. The

influence of the media and passive advertisements or passive promotions on the psychosocial development of adolescents is indeed profound.<sup>37</sup>

The parents also pointed out that giving too much spending money to adolescents, the easy availability of unhealthy products at home and in the shops, and their affordability attract adolescents to such products. The foods high in fat and refined sugars are cheaper per unit energy when compared with foods rich in protective nutrients such as fruits and vegetables,<sup>46</sup> although some parents indicated that healthy eating is also a matter of priority and not only affordability.

In order to mitigate the adolescent unhealthy behaviours of alcohol consumption, smoking cigarettes, inadequate consumption of fruit and vegetables, inadequate oral care and inappropriate consumption of sugars, the parents in the present study indicated that parental control, permissiveness and overindulgence of adolescents were contributory factors that must be addressed. They suggested that parents need to be knowledgeable about what constitutes unhealthy behaviours and seek professional help when necessary. In addition, they should carry out their parenting duties with love, provide support all the time and avoid being too authoritarian. The parents acknowledged the importance of being open with their adolescents and of spending quality time with them. They also indicated that parents should form close and good enough relationships for their adolescents to trust them and be open with them instead of going to outsiders. They wanted their children to listen and be receptive when they tried to educate them. A healthy parent-child relationship and ease of communication enhances adolescent disclosure which is very important.<sup>47-48</sup>

The parents also lamented that they did not understand their adolescent children. One of the reasons was that they were not sure exactly what they wanted, but there may be a biological explanation. The adolescent brain functions differently from that of an adult brain when processing decisions and solving problems.<sup>49</sup> This may be the reason why adolescents occasionally behave in an impatient, impulsive, irrational, or dangerous manner. At times, it seems that they do not think things through or fully consider the consequences of their actions. Scientists have identified a specific region of the brain called the amygdala which is responsible for instinctual reactions including fear and aggressive behaviour. This region develops early in life. However, the frontal cortex, the area of the brain that controls reasoning and helps us think before we act, develops later. Adolescents differ from adults in the way they behave, solve problems and make decisions because their actions are guided more by the amygdala and less by the frontal cortex of the brain. Studies show that the brain continues to develop and mature throughout childhood and adolescence and well into early adulthood; hence adolescents act differently from adults.<sup>49</sup>

This is probably the reason adolescence is characterized by a strong tendency to experiment with risky behaviours and the courage for such experimentation is much greater at this stage than in later life.<sup>50</sup> These brain differences do not mean that adolescents cannot make good decisions or tell the difference between right and wrong. However, the awareness of these differences can help parents, teachers, advocates and policy makers understand, anticipate and manage the behaviours of adolescents.

The parents in the present study unanimously acknowledged that their opportunities and ability to tame the taste buds of their growing infants, to train and nurture their mindsets (indoctrination) through early childhood and preadolescence was critical in the development and retention of health-enhancing behaviours into adolescence, especially with the provision of an enabling environment and needed support structures at home and throughout the school system. This view supports an earlier report which states that eating habits formed during childhood are likely to continue into adolescence<sup>51-52</sup> and taste preferences are a major consideration.<sup>53</sup>

This study generated a substantive theory that provides, with its novel contents, a more effective and holistic approach to the problem of adolescent unhealthy behaviours than previous theories. It went beyond the risk factors approach to comprehensively address the root causes of adolescent unhealthy behaviours. It identified new concepts related to adolescents' health-compromising behaviours and connected these new concepts in a unified manner from the interview data. The new theory provided a new perspective on parental participation on the mitigation of adolescents' unhealthy behaviours through the investigation of parents' perceptions of the psychosocial factors associated with adolescent behaviours of alcohol consumption, tobacco use, excessive consumption of sugars, inadequate consumption fruit and vegetables and inadequate oral care.

As expected from a grounded theory the proposed theory has put forward unconventional, novel ideas and unique perspectives that clarify the important and central role parents are expected to play with regard to adolescents' unhealthy behaviours. It radically emphasised the need for parents to start this role in earnest with their infants. These practices have the potential to facilitate the mitigation of the adolescent unhealthy behaviours of excessive sugar and inadequate fruit and vegetables consumption.

#### Study limitations

The limitations of this study included:

Potential selection bias: non-response or purposive selection may have excluded parents who hold views that were not represented in the focus groups.<sup>54</sup>

Reporting bias: with focus groups interviews, there is always a risk of socially desirable answers or parental responses may have been influenced by the opinions and perceptions of more vocal parents.

A limitation of qualitative research is that the results are not generalisable to the larger population because of the use of non-probability, purposive sampling strategy. Generalisability may also be compromised by the small number of research participants.

In order to minimise these limitations and enhance the quality of this study, the researchers endeavoured to gather rich data through purposive selection of information-rich participants and theoretical saturation of data. These limitations notwithstanding, the present study provides useful information on parents' perception of the psychosocial factors associated with health-compromising behaviours related to oral health among adolescents in South Africa.

## CONCLUSIONS

This qualitative study elucidated the real concerns of parents who realized how critical was their management of their offspring in influencing the susceptibility of the child to indulge in health-compromising behaviour. It has brought to the fore the need for parents to be good role models and to make conscious efforts to properly train their children from infancy through preadolescence with positive adolescent health-outcome expectancy. Parents showed a comprehension of the multiple factors which influence the behaviour of adolescents. Whilst recognizing the role of education and educational aspirations as most influential, the contribution of religion was regarded as not so relevant. In the face of numerous challenges including peer pressure and mass/social media, parents are expected to play a pivotal role in the mitigation of adolescent unhealthy behaviours. A parent cannot do this alone. Parents need one another, professionals and other institutions such as schools, governmental and non-governmental organisations. These findings could inform policy making and effective interventions to strengthen public health efforts to improve oral and general health of South Africans. They could also form the basis of future research.

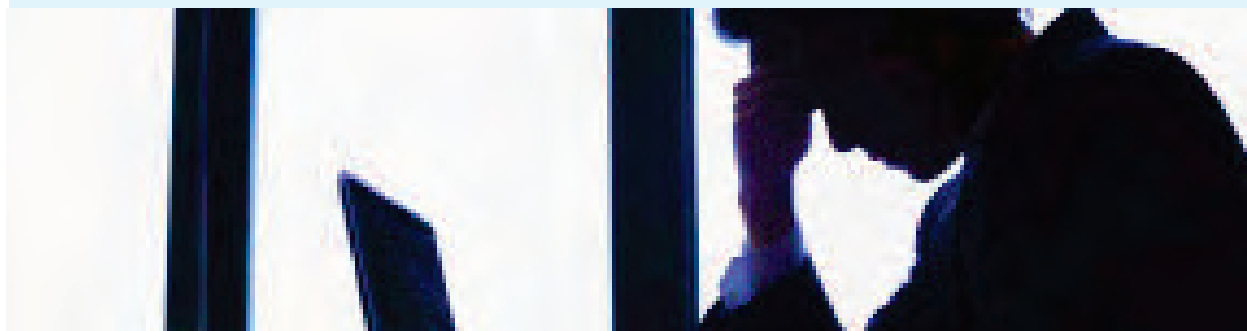
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## Do the CPD questionnaire on page 324

The Continuous Professional Development (CPD) section provides for twenty general questions and five ethics questions. The section provide members with a valuable source of CPD points whilst also achieving the objective of CPD, to assure continuing education. The importance of continuing professional development should not be underestimated, it is a career-long obligation for practicing professionals.



### Online CPD in 6 Easy Steps

- 1 Go to the SADA website [www.sada.co.za](http://www.sada.co.za).
- 2 Log into the 'member only' section with your unique SADA username and password.
- 3 Select the CPD navigation tab.
- 4 Select the questionnaire that you wish to complete.
- 5 Enter your multiple choice answers. Please note that you have two attempts to obtain at least 70%.
- 6 View and print your CPD certificate.