Adolescent Smoking – a comparison between Austria and Australia

Vorwissenschaftliche Arbeit verfasst von

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Abstract

This assignment aims to analyse the individual smoking behaviour of adolescents by comparing Austria and Australia in smoking prevalence. Recent research has shown that in Austria 14% of 15-year-olds smoke daily, while in Australia only 3.1% of such smoke daily. Generally, both countries have implemented tobacco control policies addressing young people whereas Australia has been much more successful than Austria. Adolescence is a time of rapid neurocognitive and hormonal change in which the occurrence of personality and behavioural factors as well as changes in role models, cultural and psychosocial context, create risks for smoking initiation. In fact, adolescents are uniquely vulnerable to smoking initiation and nicotine addiction throughout these years. It has been found that becoming a committed smoker at an early age lays a foundation for various diseases in adulthood, but can also have immediate health effects. Furthermore, comparing the two countries, the government's and citizens' attitudes towards smoking prevention differ significantly, which is strongly associated with the differences in recent political action in this context.

Preface

After spending an exchange year in Australia, I returned shocked about the smoking behaviour of Austrian students. During my stay in Australia I've hardly ever had to deal with the topic smoking, as it is not often discussed amongst youth and the majority of the population does not show acceptance towards smoking in general. Returning to my home in Austria, I've noticed a remarkable change not just in attitude towards smoking, but also in smoking behaviour amongst people from my school. This topic has earned my interest and for this reason I decided to do further research on the smoking behaviour of adolescents by comparing Austria and Australia.

During this time, the topic has brought up discussions in Austria when the new government has decided to repeal the law to ban tobacco from hospitality venues that should have been implemented in 2018. I was absolutely shocked by the governments inconsiderate actions and therefore it seemed important to me to further discuss the potential risks of smoking in my assignment by comparing Austria with a country that has developed one of the most effective political concepts to prevent youth from smoking.

My special thanks go to Prim.Univ.Prof. Dr. Paul Sevelda as he provided additional information within an interview and he has also been one of the major initiators of the "Don't smoke" campaign which I support a lot.

I also want to thank my dad for helping me with my research by providing many fundamental scientific papers for this assignment.

Purkersdorf, 11.01.2019, Katalin Widmann

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1. Introduction

This assignment is written to outline the key aspects of adolescence smoking, not only in Austria and Australia, but also in general. Adolescent smoking is a topic, which is widely discussed and has been determined to be a problem for the overall health of the young population. It is a fact that most smokers start during adolescence which suggests that prevention among youth is the key factor of effective tobacco control.

In the first part of this assignment, the current legal basis and tobacco control measures, that have already been implemented, are outlined. It is fairly obvious that tobacco control measures have been developed much better in Australia and therefore the smoking prevalence in Australia amongst adolescents is much lower than in Austria, which suggest that the smoke-free legislation succeeds. The policies that have been implemented and have turned out to be most successful for youth prevention, are rising taxes and prices and the introduction of smoke-free environments such as hospitality venues, workplaces and schools. Additionally, smoking is permitted at 16 in Austria and in Australia at 18 years of age.

Smoking amongst adolescents is associated with four psychological risk factors: socioeconomic, behavioural, personal and environmental. Adolescence is a time of big change, where the young people's environment, including peers and media, influences the behaviour immensely. Additionally, children tend to expose themselves to risk easier than adults do. In this context, the smoking behaviour of adolescents strongly depends on the environmental and behavioural factors. Moreover, gender, age and family are some examples of socioeconomic factors that can also affect smoking behaviour in a way. While the big change in adolescence occurs, children might develop some personality characteristics that make them more or less likely to smoke.

The third part is to raise awareness of the potential effects of smoking during adolescence. Early smoking initiation lays a foundation for serious diseases in adulthood and it can even have immediate effects on the human body. Tobacco smoke contains toxins that cause different types of cancer, various

cardiovascular and respiratory diseases. In particular, lung cancer and atherosclerosis as well as respiratory symptoms such as asthma are most frequently associated with smoking. A specific risk for adolescents is that smoking affects the lung growth and causes the development of asthma. Moreover, most people show a lack of awareness of the potential health effects of passive and occasional smoking. In reality, any exposure to tobacco products increases the risk of developing certain diseases.

Finally, comparing Austria and Australia in terms of the recent development of smoking prevalence, both countries have shown a decrease in the previous years. However, Australia has shown much more effort with implementation of anti-smoking measures and has changed the attitude of the population immensely. In contrast, the Austrian Government has just recently repealed the law to ban smoking from all hospitality venues.

The key aspects of adolescent smoking are discussed by using different scientific papers as well as a self-guided interview with Prim. Univ. Prof. Dr. Paul Sevelda. In addition, articles and studies specified on the smoking behaviour of adolescents in Austria and Australia have provided foundational content for the comparison in smoking behaviour of adolescents within these two countries.

2. Legal Basis / Tobacco Control Austria vs Australia

2.1 Australia

The Australian government has progressively developed legislation to reduce the impacts, which tobacco smoking has had on public health (cf. Dessaix, Maag & Currow, 2016, p.1).

Australia has been a part of the WHO Framework Convention on Tobacco Control since 2005.The WHO provides a structure for tobacco control measures that should be introduced in order to decrease the smoking prevalence within a country (cf. World Health Organization , 2008, p.324).

Taking into consideration that most regular smokers start smoking before turning 18, it is important to specifically address adolescents and children with anti-smoking campaigns, in order to decrease the health risks for the population (cf. Dessaix, Maag & Currow, 2016, p.1). The permission to legally purchase tobacco products in Australia is given at the age of 18. “Adolescent smoking is at a record low, with only 3.1% of people aged 12-17 years smoking daily” (White & Williams,, 2015,p.17). As outlined in the WHO FCTC, further investment in tobacco control will be necessary to achieve continuous declines in smoking prevalence amongst adolescents.

Figure 1 - Factors affecting declines in adolescents smoking in Australia, 1996-2014 (*Dessaix, Maag, McKenzie & Currow,2016,p.2)*

2.1.1 Advertising

As seen in Figure 1, between 1976 and 2008, several regulations regarding the advertisement of tobacco products were introduced to support the reduction of adolescent smoking. These regulations include taking out the direct advertising of cigarettes in radio and television, as well as banning remaining forms of print media and sponsorships at public events. These measures have reduced the prevalence of young smokers since 1976 (cf. Dessaix, Maag & Currow, 2016, p.3).

However, the tobacco industry is ambitious to promote their products in a legal way. In fact, the occurrence of smoking in video games has increased by 8% in the recent years (cf. Perez, et al., 2012,p.5). Further investment will be required to decrease the number of smoking adolescents who are influenced by such advertisements.

On the other hand, the Australian government has made mass media anti-smoking advertising programmes an essential component of the tobacco control programmes (cf. Chapman & Wakefield, 2001,p.276). “Multiple studies have shown that mass media advertising of antismoking campaigns can reduce

smoking prevalence among adolescents" (White, Durkin, Coomber, & Wakefield, 2013, p. 198).

2.1.2 Tax, Prices and Fines

Australia has introduced increased taxes and prices for tobacco products, in order to reduce the number of adolescence smokers. Additionally, Australian regulatory changes were made, such as fines up to AUD$2000 for smoking in a smoke-free place (McDermott, 2017,p.2). The average price per pack of cigarettes is about 16.80 euros and has continuously risen in the previous years as seen in Figure 2 (n.N., 2018).

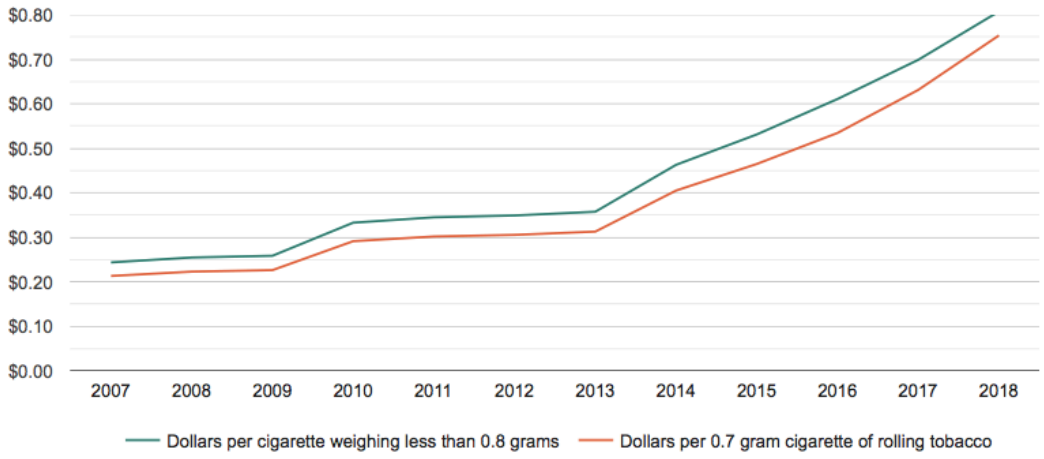

Figure 2 - Value of excise and customs duty on factory-made cigarettes and rolling tobacco at 0.7 grams per cigarette (*Scollo, Bayly,2016, 13.3 The price of tobacco products in Australia)*

In Australia, a continuous rise in cigarette prices has been one of the most effective anti-smoking measure, especially in targeting young smokers (cf. Scollo, Younie, Wakefield , Freeman, & Icasiano, 2003, p.59). "Between 1990 and 2005, the average price of a cigarette rose from $0.18 to $0.41.[…]During this time, national adolescent smoking prevalence declined from 22.9% to 13.3%" (Dessaix, Maag & Currow, 2016, p.2). The high prices, taxes and fines brought by violations, have been well established to reduce the prevalence of adolescents smoking.

2.1.3 Pack Warnings

The Australian government was the first one to introduce plain cigarette packaging as well as banning any kind of branding. The key objective of these developments is the reduction of cigarette pack appeal among adolescents (cf. Dessaix, Maag & Currow, 2016, p.2).

Figure 3 - The lung cancer health warnings as they have appeared on Winfield Blue From left: a) 1987 to 1994; b) 1995 to 2005; c) 1 March 2006 to 30 November 2012; d) 1 December 2012 onwards (Scollo, Winstanley,2018, 12.1 Health Warnings)

Nowadays, the cigarette packs carry no logos, are dark coloured and almost entirely covered by health warnings and graphics that show the potential consequences of smoking (Figure 3). These changes turned out to be the top of the anti-smoking campaigns in Australia since 1970 (cf. McDermott, 2017,p.4). There have not been any long term effects shown yet, but reductions in adolescent smoking have already been associated with the reduced attractiveness of cigarette packs (cf. U.S.Department of Health and Human Services, 2012,p.6).

2.1.4 Regulations at Public Places

The Australian government has introduced a smoking ban from a variety of public indoor and outdoor places in the past six years. Those areas include workplaces, bars and restaurants as well as outdoor areas such as children playgrounds, public swimming pools and beaches and public transport stops and stations. Also,

cigarettes are banned from vehicles if kids are present as well as jails. In case of violation, high fines will be charged (cf. Dessaix, Maag & Currow, 2016, p.3; McDermott, 2017,p.2). There has been evidence that a smoke-free restaurant law was particularly associated with reduction in adolescent smoking prevalence. ”Our findings suggest that smoke free restaurants may limit adolescent opportunities for smoking and, thus, both reduce the use of cigarettes as well as their frequency” (Hawkins, Bach, & Baum, 2016,p.7).

2.2 Austria

In 2002 the European Union has developed a strategy for a smoke-free Europe, which included a number of tobacco control policies that have had a major effect in most countries.

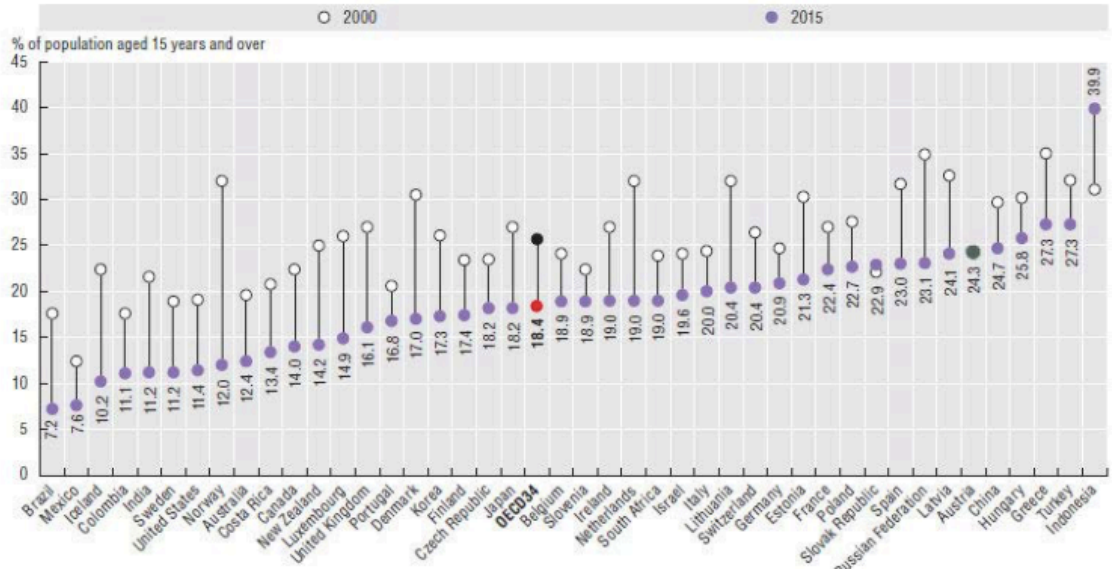

Figure 4 - Development of Smoking Prevalence between 2000 and 2015 among 15-year-olds in 34 OECD countries (*OECD ,2017, p.71)*

By comparing Austria to other countries such as Norway or the Netherlands, it stands out that these countries have shown major changes in smoking prevalence among 15-year-olds and older, whereas Austria remains with one of the highest adolescent smoking rates. Additionally, the prevalence of smoking amongst the population aged 15 or older has not decreased since 2000, which is an indicator for the lack of effectiveness of tobacco control policies. One major aspect of this development is that in Austria smoking is permitted at the age of

16 which will be raised up to 18 in 2019 (cf. Bundeskanzleramt Österreich, 2019). In Austria 15% of the 15-year-olds report to smoke daily and 28% report that they have smoked in the previous 30 days (cf. OECD/European Observatory on Health Systems and Policies, 2017,p.4-6; OECD/EU, 2018,p.112). Many regulations, to decrease the number of young smokers in Austria, have been introduced since 1995 (cf. Hofmarcher & Sirlinger, 2006, p.4). There have been declines especially amongst 15 to 16-year-olds, but the prevalence of regular smokers amongst adults remains high (cf. OECD/European Observatory on Health Systems and Policies, 2017). In 2015, a law for smoke-free hospitality venues without exceptions was decided by the Austrian government. However, the new government has repealed the law again, which is one example of the poor development of tobacco control in Austria (c.f Ärztekammer für Wien, Österreichische Krebshilfe, 2018).

2.2.1 Advertising

The implementation of regulations in advertising is a key component of an effective tobacco control among adolescents. The presence of advertisements in the media has strongly influenced the development of opinions among adolescents. There has been evidence that the smoking behaviour of young adults is strongly influenced by frequent exposure to tobacco advertising. In reality, advertisements addressing young people, have increased the odds of trying to smoke by 79-90% and becoming a regular smoker by 12% (cf. Shadel, Tharp-Taylor, & Fryer, 2008,p.752).

In order to reduce the effects that advertising has on attitudes, the Austrian government has introduced regulations regarding advertisements and sponsoring. These adjustments include the ban of advertising as well as any promotion from print media, radio and television. An exception for this rule is advertising in special convenience stores and the promotion from tobacconists. These advertisements always have to include warnings in a certain size. The tobacco industry has managed to keep advertising bans away from cigarette machines and from various (Social) Media platforms. Considering how much time an average adolescent spends on these platforms, several tobacco

advertisements are still provided for teenagers (cf. Bundeskanzleramt Österreich, 2018).

2.2.2 Taxes and Prices

In Austria, cigarette prices and taxes have risen continuously in the past years but are still one of the lowest in the European Union. The minimum cigarette price in Austria is 14% lower than the average in the European Union (cf. N.N., Österreichs Preise im EU-Vergleich, 2017). The average cigarette price in Austria is 5,5 Euros, which is considered fairly low, compared to other countries in Europe. Tax and Price measures, to reduce smoking prevalence in Austria, have not shown adequate improvement so far and further price increases will be necessary to significantly decrease the number of smokers in Austria (cf. N.N., 2015).

2.2.3 Pack Warnings

The Austrian government has developed regulations for the design of tobacco packs. A certain number and size of health warnings are compulsory. The health warnings, which have been put into force on cigarette packs include “Rauchen ist tödlich- hören sie jetzt auf” (“Smoking is deadly – stop now”). and “Tabakrauch enthält über 70 Stoffe, die erwiesenermaßen krebserregend sind” (“Tobacco smoke contains over 70 chemicals that have been proven to cause cancer”). In addition, all tobacco product packs include a phone number for a hotline to encourage people to stop smoking. Branding has not yet been forbidden on cigarette packs, which is likely to have an effect on the smoking behaviour of adolescents (cf. Bundeskanzleramt Österreich, 2018).

2.2.4 Regulations at Public Places

Austria introduced smoke-free educational facilities, workplaces and various other indoor and outdoor areas (cf. Bundeskanzleramt Österreich, 2018). However, Austria has often been named as an example of inadequate tobacco control, especially in terms of regulations at public places (cf. Ärztekammer für Wien, Österreichische Krebshilfe, 2018).

In 2015, a law was drafted to ban vaping and shishas as well as smoking cigarettes from all public bars and restaurants without exceptions. The new government, that has only been elected in 2017, consisting of the conservative Austrian People's Party (Oesterreiche Volkpartei, OeVP) and the right-wing nationalist Freedom Party of Austria (Freiheitliche Partei Oesterreichs, FPOe) has decided to repeal this law, which was supposted to enter force in May 2018. In respond to this decision, numerous medical practitioners have come up with the "Don't smoke" campaign to get support from Austrian citizens in their opinions (cf. Fohringer, 2017).

In response to this development, some medical practitioners campaigned publicly against reversing the law. The "Don't smoke" campaign has already reached more than 880 000 signatures and therefore this topic has to be brought up in the Parliament again (cf. Ärztekammer für Wien, Österreichische Krebshilfe, 2018).

2.3 Effectiveness of Tobacco Control

The tobacco control measures, that have turned out to be most effective to decrease smoking amongst adolescents in Australia, have been higher prices and taxes as well as the reduction of smoking at public places. The average cigarette package price in Australia is 16.80 Euros while in Austria it has only gone up to a minimum price of 4.76 Euros (cf. n.N., 2018; Germany SPIEGEL ONLINE, 2018).

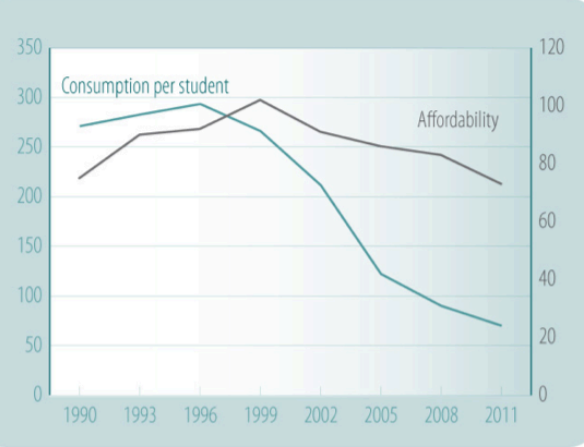

Figure 5 - Reported consumption per secondary school student in Australia per year vs. affordability, 1990–2011 (number of cigarettes affordable per week to an average) (Scollo, Winstanley, 2018, 13.5 Impact of price increases on tobacco consumption in Australia)

According to Figure 5, the probability that adolescents start smoking declines, as the cigarette prices increase. Regarding smoking regulations of public places, Australia is much more advanced than Austria. Smoking is not permitted at workplaces, bars restaurants as well as beaches, playgrounds and public transport stops. In Austria, there still is not a complete law that regulates smoking in restaurants and bars. The previous government has introduced a law to ban smoking from all hospitality venues but the current one, that has just been elected in 2017, repealed the law. Restaurants and bars are opportunities for young people to smoke their first cigarette. A ban from hospitality venues might therefore be essential to prevent early smoking initiation (cf. Sevelda P., 2018, Appendix 2, Interview). Furthermore, smoking in Australia is only permitted at the age of 18 while, until now, adolescents are allowed to smoke at only 16 years of age in Austria. Moreover, regulations regarding the pack warnings and advertisements are much better developed in Australia which could also make a difference in smoking prevalence.

3. Psychological risk factors for adolescents smoking

“Smoking initiation among adolescents is a complex multifaceted phenomenon that is associated with four categories of psychological risk factors:

socioeconomic, behavioural, personal, and environmental" (Pizzo, Licata, & Davis, 2008, p.149-150). Many studies have examined how these four factors relate to adolescent smoking in order to find regulations that stop the increasing smoking prevalence among adolescents (cf. Pizzo, Licata, & Davis, 2008,p.149). The reason why it is particularly important to address adolescents in smoking prevention is that 80% of all smokers start during adolescence, and if smoking initiation does not occur before turning 18, it is very unlikely to occur later on (cf. Vogeltanz-Holm, et al., 2008,p.27).

3.1 Sociodemographic factors

The sociodemographic risk factors that affect the smoking behaviour of adolescents include family structure and parents' socioeconomic status as well as age and gender. There are significant differences in risks for boys and girls as well as different age groups. The aspect of family structure and size as well as the socioeconomic status of the parents are also determined to be a risk factor for adolescents smoking (cf. Tyas & Pederson, 1998,p.412).

3.1.1 Gender Aspect

Several studies have shown inconsistent results regarding the gender aspect of adolescents smoking, which is associated with geographical and cultural differences. Also, smoking might serve different needs to girls and boys. For example, for many girls smoking creates a weight control tool while weight control is not associated to be a risk factor for boys to start smoking (cf. Pesut, Maat, & Bursuc, 2008,p.129). In 2014, 5.1% boys and 5.9% girls from Australian secondary schools were reported to be regular smokers (cf. White & Williams , 2015,p.8). This shows that equal amounts of boys and girls smoke, however that does not mean that they have the same reasons for it.

3.1.2 Age

Research has shown that risk for smoking initiation increases as adolescents get older, which directly correlates with the fact that starting to smoke at a young age causes risk to become a regular smoker in adulthood and less likely to quit (cf. Tyas & Pederson, 1998,p.412). Moreover, the aspect of age correlates with the

environmental factors. “For example, the school environment influence on adolescent smoking increases with their ages with family environment influence (e.g. parents’ smoking) decreases gradually” (Pizzo, Licata, & Davis, 2008,p.153).

3.1.3 Family Structure

There has been research that clearly stated an increased risk for adolescents from divorced and separated households compared to children from an intact family (cf. Kirby, 2002,p.63). Also, involvement with non-resident fathers decreases the risk for a child’s potential smoking uptake. The presence of a family member that smokes increases the likelihood for adolescents to start smoking regularly (cf. Menning, 2006,p.42-43).

3.2 Environmental factors

There are a couple of key aspects of environmental factors that strongly relate to adolescent smoking. One factor that differs, is the importance of attitudes and norms, not just within a family, but also within different age groups in different countries. These attitudes and norms also have a great influence on the gender aspect in adolescents who smoke in different areas. The parents’ and, with increasing age, the peers’ attitudes towards smoking are two of the most influential risk factors that encourage becoming a regular smoker during adolescence. Strongly linked to the peer influence aspect, factors related to the school environment have a great effect on the smoking behaviour at a young age (cf. Pizzo, Licata, & Davis, 2008,p.152).

3.2.1 Peer Influence

There has been evidence that the risk of tobacco use among adolescents increases when tobacco is used by other family members, siblings, peers, supervising teachers as well as the attitude of these people. An increased risk for smoking has been identified for adolescents belonging to a smoking group of friends. In addition, with increasing age, adolescents tend to be more influenced by peers and less by parents and therefore smoking in teenage years is primarily

associated with peers' smoking behaviour but in younger ages the risk is strongly influenced by the parents (cf. Pizzo, Licata, & Davis, 2008,p.152-153).

3.2.2 Parental Smoking

Parental smoking is determined one of the largest risk factors for adolescent smoking. Also, parental attitudes towards smoking have been identified to affect the smoking behaviour of adolescents. "It has been reported that adolescents who perceive that their parents would strongly disapprove of smoking are significantly less likely to smoke" (Sargent & Dalto, 2001,p.1260-161). In addition, there has been evidence that parents tolerating their children to be a regular smoker prevents them from attempting to quit (cf. Pizzo, Licata, & Davis, 2008,p.152).

3.2.3 Media Influence

The environmental factor that has probably most increasingly become a risk factor for adolescence smoking is the influence of media sources such as movies, television, video games and print. The exposure to these pictures, which are shown in a variety of media sources, can lay a foundation for increasing acceptance of tobacco use among adolescents (cf. Pizzo, Licata, & Davis, 2008,p.153).

3.3 Behavioural factors

The major behavioural factors that have been associated with adolescent smoking were factors related to school and primarily academic performance as well as risk-taking. Also, lifestyle factors such as diets and exercise have been considered, influencing adolescents smoking behaviour. All these factors are in a strong correlation with other psychological factors. For example, when looking at these factors, girls tend to smoke more than boys, considering the weight control aspect which links behavioural factors with the gender aspect (cf. Pizzo, Licata, & Davis, 2008,p.150).

3.3.1 Influence of Academic Performance and Aspiration

There has been evidence that students who are satisfied with their own life, future oriented and receive good grades in school are less likely to smoke. In addition, smokers generally tend to receive lower grades in school than non-smokers. Academic performance in school is also associated with friends' selection and therefore with the peer influence of whether to smoke or not. This suggests that good students tend to spend time with other non-smoking good students and smokers tend to choose smoking friends that receive poor grades to reinforce their behaviours (cf. Pesut , Maat, & Bursuc, 2008,p.130). Those findings suggest a strong relationship between smoking behaviour and academic performance in school.

3.3.2 Lifestyle

Certain lifestyle factors are considered to be risk factors for adolescents smoking. Exercising and diets have been major reasons for young people, especially females, to smoke. Research has shown that young smokers and non-smokers report "being slim" as a motivation to smoke. Over many decades, the tobacco industry has used advertisements of young skinny women to attract females to buy certain cigarette brands (cf. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, 2012,p.31-45). In general, early smoking initiation is strongly associated with less physical activity. In addition, physical activity during adolescence has a positive effect on certain characteristics that may protect young adults from smoking onset including perceived coping ability and self-esteem (cf. Kujala, Kaprio, & Rose, 2007,p.4).

3.3.3 Risk Behaviour

There has been research on the effects of early smoking initiation on the usage of marijuana or other drugs. In fact, adolescents who smoke are more open to other drugs than non-smokers. An outcome of early smoking onset or other drug abuse could be neuroplastic changes that favour continued use. These changes particularly have a great effect on a developing brain. Additionally, young smokers in general tend to suffer from substance abuse disorders as well as early

start of drinking and alcohol disorders later on in life (cf. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, 2012,p.29).

3.4 Personal factors

3.4.1 Personality Characteristics

There is evidence that particular personality or temperament traits are a risk factor related to smoking. In extreme cases, these characteristics may be presented as mental health issues. The risk might differ by the influence of other risk factors such as peer influence or the gender aspect (cf. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, 2012,p.23).

Rebelliousness against school and adult authorities has been identified as a personal risk factor for adolescent smoking, as young people are generally told not to smoke and therefore the initiation of smoking would be a clear symbol of the resistance to parents' authority. Furthermore, rebelliousness has been examined to be a more powerful predictor of continuing to smoke than smoking acquisition (cf. Otten, Bricker, Liu, Comstock, & Peterson , 2011,p.167).

For young people, smoking might often be seen as a method to cope with negative emotions including anxiety and stress. Reduction of stress is often stated as a reason to continue smoking but the effect of tobacco on the stress system is quiet complex. Acute nicotine injections can reduce stress levels but with repeated use of nicotine the effect on the stress system alters and actually disrupts the stress response in both acute stress as well as chronic stress (cf. Holliday & Gould, 2016,p.4).

3.4.2 Personal Health Concerns

It is well known that smoking results in social consequences, including bad brath and yellow teeth. Sensibility towards these changes from smokers decreases the risk of becoming a regular smoker. Research amongst a group of young non-smokers has shown that health related concerns, aesthetic concerns and economic concerns have most frequently been mentioned as motives to be a non-smoker.

The awareness of the consequences of early smoking uptake of adolescents has not turned out to correlate with the smoking behaviour of young people. A study, which was conducted among 11-15-year-old students stated that most students are aware of the potential effects of smoking, but still 65% determine smoking a good way to relax and 20% thought smoking could replace a diet and helps to lose weight or is not dangerous at all (cf. Scollo & Winstanley, 2018, 5.6 Intentions, attitudes and beliefs).

3.4.3 Mental Health Issues related to adolescents smoking

There is a strong association between smoking initiation amongst adolescents and the development of psychiatric disorders. In addition, being a regular smoker supports the tendency to other substance abuse as well. The appearance of depression, drug and alcohol use as well as bipolar disorders are more likely to occur in the life of a smoker than in a non-smoker's. Moreover, adolescents with depressive disorders tend to initiate experimental smoking and become regular users of tobacco smoke and therefore nicotine-dependent. In addition, young adults that suffer from anxiety disorders have increased rates of daily smoking. This suggests that there are reversible processes between adolescents smoking and mental health issues, as smoking can support the development of psychiatric disorders. In reality, young adults who are struggling with mental health issues tend to smoke in order to lighten their symptoms (cf. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, 2012,p. 29).

4. Health Effects of Smoking Initiation among Adolescents

Tobacco smoke is a mixture of more than 5000 toxins and chemicals, including a wide range of carcinogenic substances (cf. Talhout , et al., 2011, p.614). According to the WHO statistics, 5.6 million deaths have directly been caused by the health consequences of tobacco smoke world-wide (cf. World Health Organization, 2008).

The effects of early smoking uptake in childhood and adolescence can be foundational for various diseases in adulthood, but can also have immediate effects on the health of adolescents. The most commonly known causes of death

are certain forms of cancer, respiratory diseases, cardiovascular diseases and other health problems that have strongly been associated with active and passive smoking during childhood and adolescence. There has also been evidence that nicotine addiction develops very rapidly in young smokers compared to adults who smoke regularly (cf. Letcher, Greenhalgh, & Winstanley, 2015, 3.21 Health effects for younger smokers).

The negative impact that active smoking might have on the human body is generally recognized. In comparison, the health consequences of passive smoking are not fully understood, as there has been research that second-hand smoke and active smoking might equally increase the risk for certain diseases (cf. Shiyi , Chen , Yong, & Zuxun , 2015, p.2).

4.1 Cancer

Aldehydes, volatile organic hydrocarbons, metals and N-nitrosamines have been established to be examples of the over 60 carcinogens in cigarette smoke. The fact that tobacco smoking can cause cancer is well known, but there are some extremely complex mechanisms behind the process from smoking cigarettes to cancer development.

The type of cancer most commonly associated with smoking is lung cancer. In fact, 90% of all lung cancers are related to smoking. The duration and intensity of smoking plays a major role in estimating the risk for lung cancer amongst smokers. In fact, the risk to develop lung cancer continuously increases as people get older because the smoking duration increases. After quitting smoking the risk of suffering from lung cancer decreases continuously. There has been research that states that the younger the age when quitting, the greater the benefit.

Other types of cancers that are linked to smoking are upper aero digestive tract [1]cancers, stomach cancer, kidney and bladder cancers[2] as well as acute myeloid leukaemia (cf. Hurley, Greenhalgh & Winstanley, 2015, 3.3 Smoking and cancer).

[1] obere Luft und Speisewege

[2] Blasenkrebs

4.2 Cardiovascular Diseases

There has been evidence that 17-30% of all cardiovascular diseases are associated with smoking (cf. Hujová, et al., 2011,p.67). Active and passive smoking during adolescence can cause various cardiovascular diseases, including atherosclerosis[3] and coronary heart disease in adulthood.

Early smoking initiation is a risk factor for acceleration of the atherosclerosis grade in the abdominal aorta[4] and the descending coronary artery. More advanced atherosclerotic lesions are likely to occur around the age of 30 and fundamentally change the cardiovascular system. Furthermore, the mortality for tobacco use from abdominal aortic aneurysm is at 80%. This highlights the significance that early smoking initiation has for the human body, in particular for the cardiovascular system (cf. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, 2012,p.97-101).

Smoking adolescents, who already suffer from certain diseases or whose health is compromised, also have a higher risk for certain cardiovascular diseases. For example, diabetes in combination with smoking has been considered to be a major risk factor for early development of cardiovascular diseases such as atherosclerosis. Moreover, there has been evidence that smoking during adolescence can potentially lead to isolated systolic hypertension[5]. This was mentioned to be a concerning health outcome as even slight increases of blood pressure can lead to a variety of cardiovascular diseases later on (cf. Letcher, Greenhalgh, & Winstanley, 2015, 3.21 Health effects for younger smokers).

Regular smoking during pregnancy can cause dramatic cardiovascular changes in the foetus. In addition, exposure to passive smoke in infancy and childhood makes the child more vulnerable to certain diseases and the general development of the child can also be affected by tobacco smoke (cf. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, 2012,p.97-101).

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[3] Verengung der Gefäße durch Verkalkung

[4] größte Schlagader des Körpers, die aus der linken Seite des Herzens entspringt

[5] eine Form von Bluthochdruck

A key indication that the risk for certain cardiovascular diseases is concerning is that even with a significant reduction of smoking, a high risk for cardiovascular diseases remains. There has been evidence that the risk for developing coronary heart diseases and stroke is about 40-50% if you reduce 20 cigarettes a day down to 5. This suggests that the assumption, that light smoking causes little harm, is wrong (cf. Hackshaw, Morris, Boniface, Tang, & Milenkovic, 2017,p.8).

4.3 Respiratory Symptoms

The development of a human lung is strongly influenced by the amount of tobacco smoke it is exposed to during childhood and adolescence. In fact, a boy's lung growth is shortened by one year while a girl's lung growth is shortened by two to three years. This lack of development remains for the whole life and can support various respiratory symptoms. This suggests a significant change in lung function during adolescence that remains in adulthood (cf. Wiencke & Kelsey, 2002). In addition, active smoking potentially leads to a lower maximal lung function as well as an earlier decline in lung function. Those effects on the lung also lead to a reduced maximal exercise tolerance in early adulthood.

A number of chronic respiratory symptoms and diseases have turned out to produce significant health issues in young adults. Those respiratory symptoms include wheezing, coughing, dyspnea[6] and phlegm. Additionally, active smoking has strongly been associated with early development of asthma (cf. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, 2012,p.86-87).

4.4 Effects of passive smoking

Recently, numerous anti-smoking measures were introduced to protect children and adolescents from active and passive smoke (cf. Kuntz & Lampert, 2016,p.23). Even though the effects of second-hand smoke have not been fully investigated, several respiratory and cardiovasular diseases, bacterial infections and certain types of cancer have been associated with passive smoking. In Austria, an average of 3 people per day die from diseases that have directly been

[6] Kurzatmigkeit

caused by passive smoking. Furthermore, it has been found that second-hand smoke kills around 600 000 non-smokers worldwide every year, including 165 000 children. In 2004, 40% of the children, 33% of non-smoking men and 35% of non-smoking women, were exposed to second-hand smoke. As a result, 60% of passiv-smokers die of heart diseases, 30% of respiratory diseases (cf. Öberg, Jaakkola, Woodward, Peruga, & Prüss-Ustün, 2010,p.6-7).

In previous research, the potential health consequences caused by the exposure to passive smoke, have often been left out and therefore recent investigations have increasingly focused on the effects of second-hand smoke. One of the most significant health risks that come with an increased exposure to second-hand smoke is cancer. In fact, non-smokers often suffer from lung cancer, cervical cancer or other types of cancer caused by tobacco smoke who might have never actively smoked a cigarette before. According to Cao, Yang, Gan and Lu (2015), the effects of second-hand smoke on many types of cancer have not been fully investigated yet. Focusing on the health outcome of children's passive smoking, increased risk for bacterial infections such as middle ear disease, respiratory infections as well as allergic diseases and childhood asthma, have been found.

It is assumed that long term cardiovascular changes can also be a result of smoking during childhood and adolescence. The occurrence of arterie's wall thickening, lower blood levels of HDL and inflammations[7] are just some examples of those (cf. Campbell, Ford, Winstanley, 2017, 4.8 Cardiovascular disease and secondhand smoke).

4.5 Health Risks of occasional and light smoking

Evidence has shown that occasional smoking increases mortality by 30% compared to never smokers. Occasional smokers often think of themselves as non-smokers, which suggests that the significant health risks associated with occasional smoking have not sharpened awareness amongst the population yet (cf. Løchen, et al., 2017,p.4-5).

[7] Entzündungen

In addition, light smoking (1-4 cigarettes/day) increases the risk for developing a variety of diseases in adulthood, including certain cardivasucular diseases and cancer. Light and intermediate smoking has been determined to carry similar risks for cardiovascular diseases as heavy smoking. The risk of developing lung cancer with light smoking, is 5 times as high for men and 3 times as high for women than for never-smokers. Occasional and light smoking also turned out to increase the risk of gastrointestinal (oesophagus[8], stomach, pancreas[9]) cancers. Additionally, light smoking can lead to lower respiratory infections, including symptoms such as cough and wheezing, as well as physical disabilities (cf. Schane, Ling, & Glantz, 2010,p.1-6).

4.6 Effects on Health Outcomes

After quitting to smoke it takes 10 years on average for the human body to neutralize the frequent exposure to tobacco smoke, which means that after 10 years the body has a similar probability to suffer from smoking-associated diseases as the body of a non-smoker. Tobacco smoke leads to numerous negative health outcomes, in long term as well short term. A decline of smoking prevalence would therefore support the overall health of the population (cf. Sevelda P., 2018, Appendix 2, Interview). There has been research on the effects of smoke free legislation on health outcomes, especially in short term, as the long-term effects haven't been fully investigated yet.

Smoke-free Legislation in Scotland has led to a decrease by 17% for admissions for acute coronary syndrome after implementation of smoke-free laws while in England, without smoke-free legislation it only decreased by 4%. There has also been evidence that exacerbations of asthma decreased by 22%, 24% for adults 20 or older and 18% for children aged 19 years or younger (cf. Scollo & Winstanley, 2018, 15.10 Effects of smokefree legislation on health outcomes).

[8] Speiseröhre

[9] Bauchspeicheldrüse

5. Comparison

5.1 Analysis of Statistics

5.1.1 Australia

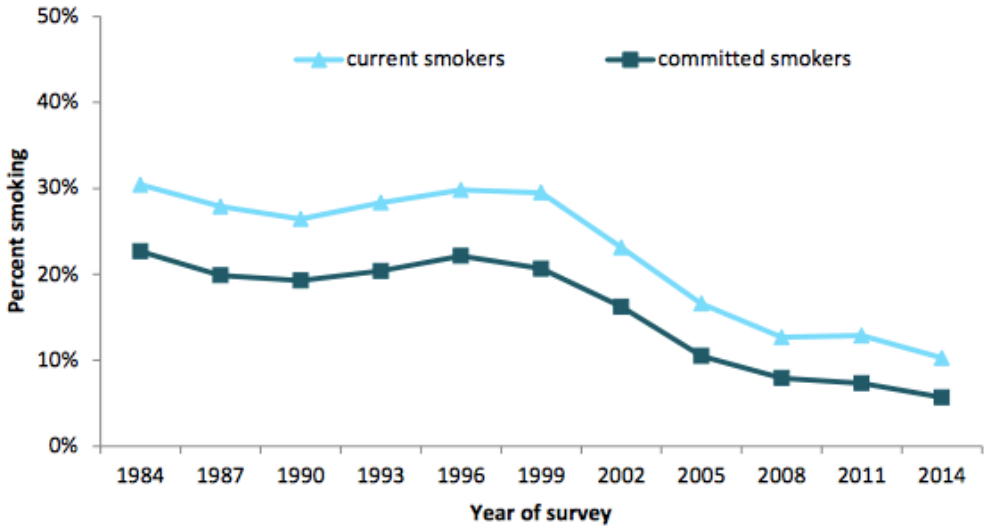

Figure 6 - Trends in proportion of current (smoked in past seven days) and committed smokers (smoked on 3 or more days of past seven days) among 16- and 17-year-old students, Australia, 1984-2014 (*White, Williams, 2015,p.35)*

As seen in Figure 6, Australia's tobacco control policies have been successful and the adolescents smoking prevalence continuously decreased to a record low since 1984. In 1984 the number of 16-17-year-old current smokers was fairly high, at about 30%. In the following 20 years tobacco control policies and a change in attitude towards smoking within the young population has led to a decrease by about 20%. For committed smokers, who have smoked at least 3 days in the past 7 days, smoking rates have declined from over 20% to less than 10%. After a period of slight increase of smoking prevalence amongst 16 and 17 year olds, it most significantly decreased between 1999 and 2005. (Figure 6) The Australian Government spent 155 084 345 AUD on tobacco control, including tax and price increase, ban of advertisement and smoke-free environments, to secure a decline in smoking prevalence amongst adolescents (n.N., 2017).

5.1.2 Austria

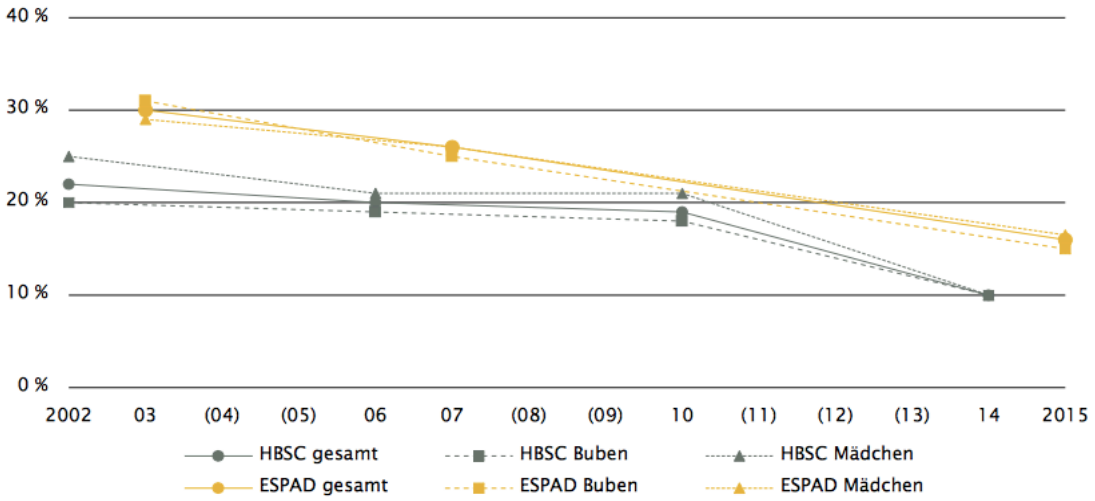

Figure 7 - Prevalence of daily smokers in Austria amongst 15 – year-olds,2002-2015 (Anzenberger, Busch, Grabenhofer-Eggerth, Kerschbaum et al.,2017, p. 82)

Austria is a popular example of poor tobacco control in Europe. Even though, many tobacco control measures have been put into force, the effectiveness of these regulations seems poor. In fact, Austria has one of the highest smoking rates amongst adolescents in Europe which can simply be explained with inadequate tobacco control (Bundeskanzleramt Österreich, 2018).There has been research that shows slight difference in development of smoking prevalence amongst 15-year-olds. According to the HBSC study, the daily smoking prevalence was over 20% in 2002 and decreased to 10% in 2014. The most significant decline occurred between 2010 and 2014. In comparison, the ESPAD study states that the smoking rate in 2003 was at 30% and decreased to around 17% in 2015. It seems that the decline happened continuously over the years (Figure 7).

It should be mentioned that this figure only provides data for daily smokers. Adolescents often determine themselves as occasional smokers and tend to become daily smokers later on. In reality, 29,6% of the 15-30-year-olds in Austria are daily smokers, 7% are occasional smokers, 21,6% are ex-smokers and only 50% are never-smokers. This suggests that occasional smoking decreases as

the age increases in young ages and daily smoking increases (cf. Klimont & Baldasz, 2014).

5.2 Key aspects in differences in smoking prevalence between Austria and Australia

Comparing the smoking rates of Austria and Australia, the smoking prevalence among adolescents is significantly higher in Austria than in Australia. To exemplify, among 15-year-olds the daily smoking prevalence in Austria is at 14% while in Australia it only goes up to 3.1% (White & Williams, Australian secondary school students' use of tobacco in 2014, 2015;OECD/European Observatory on Health Systems and Policies, 2017,p. 4-6). Another aspect in which the two countries show significant difference is the amount of money the governments provide for tobacco policies. In Austria in 2016, 50 000 Euros were spent on measures whilst in Australia over 150 000 000 AUD were provided from the government. Therefore, Australia had a much wider variety of measures introduced and this suggests a direct correlation of tobacco control measures and smoking prevalence (cf. n.N., 2017).

According to Dr. Paul Sevelda, an extensive political concept is needed to change the Austrians' attitude towards smoking and reduce numbers amongst young people in particular. There are many countries where the government supports the idea of introducing strict tobacco control measures in order to secure the citizens' health. The Austrian government has just recently repealed a law to ban smoking from all hospitality venues which would have been a key aspect of smoking prevention in young people. Hospitality venues are the spots where young people get offered their first cigarette and peer pressure is too strong for adolescents to stay away from smoking. Austria has developed in tobacco control but in comparison to other countries it still is far behind and for future success the government should invest much more to secure reduced smoking prevalence in Austria (cf. Sevelda P., 2018, Appendix 2, Interview).

In contrast, Australia has managed to ban tobacco smoke from any hospitality venues. In addition, the price per pack of cigarettes is 16.80 Euros in Australia and 4.76 Euros in Austria. (cf. n.N., 2018; Germany SPIEGEL ONLINE, 2018).

According to Dr. Paul Sevelda, those two measures are most significant regarding smoking prevention amongst youth. Besides the fact, that young people tend to be short by money, smoke free hospitality venues might not give an opportunity to smoke the first cigarette and therefore be an effective prevention method. Dr- Paul Sevelda determines the age regulations as a measure that only shows poor effects, as a 16-year-old and an 18-year-old is at a similar point in development and there are no authorities that regularly check use of tobacco among youth (cf. Sevelda P., 2018, Appendix 2, Interview).

6. Conclusion

To summarise, Australia and Austria show significant differences regarding the smoking prevalence amongst adolescents. To begin with, the legal basis and implementation of tobacco control policies in Australia is far better developed than in Austria, which has led to a continuous decline in smoking prevalence among youth over the previous years. Austria has also made progress in tobacco control but still struggles with the effectiveness of the implemented measures. In particular, measures regarding the tax and price policies as well as smoke-free environments have been effective in Australia whereas Austria has not progressed well in that way.

Certainly, the majority of people are not aware of psychological factors that influence the smoking behaviour of adolescents. It is widely known that smoking is determined to be a method to cope with stress but in reality, there are many more factors that are reasons for young people to smoke. The most significant aspect, that is often underestimated by pupils, is how much effect the peers' smoking behaviour has on adolescents, including parents, friends and authority figures such as teachers. Therefore, the general smoking behaviour of adults in the presence of young people should rise.

The significance of health outcomes that early smoking initiation can cause were surprising, also in terms of passive smoking. Smoking during adolescence can lead to numerous diseases in adulthood and it can also have immediate effects. The major impact that second-hand smoke has on the body of non-smokers is

surprising, as over 600 000 people are killed as a result of the effects of passive smoke every year.

The Austrian government currently discusses a law that should have banned tobacco smoke from hospitality venues, but was repealed. This topic has been widely discussed and medical experts in Austria are not willing to agree with the government's decisions. The key of future tobacco prevention is targeting youth and addressing their reasons to smoke in order to identify alternative behaviours that replace psychosocial functions previously fulfilled by smoking cigarettes. Political measures regarding prices and regulations in public will be determining the decline in smoking prevalence amongst adolescents. In order to achieve this, the overall attitude towards smoking of Austrian citizens and of the government needs to change.

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Appendix

Appendix I. Table of Figures

Appendix II. Interview with Prim. Univ. Prof. Dr. Paul Sevelda (Präsident der österreichischen Krebshilfe)

Ich: Warum ist genau Rauchen schlecht für die Gesundheit? Es gibt auch viele andere Dinge wie zum Beispiel eine schlechte Ernährung oder Bewegungsmangel, die schlecht für die Gesundheit sind?

Sevelda: Der gesundheitsgefährdende Effekt des Rauchens besteht darin, dass in dem Rauch neben dem Nikotin noch sehr viele andere Schadstoffe enthalten sind, vor allem auch durch Feinstaubbelastung werden diese Schadstoffe in der Lunge aufgenommen und können dann dort ihre negative Wirkung entfalten. Die wichtigsten sind Krebserkrankungen, Lungenkrebs aber auch viele andere Krebserkrankungen sind damit assoziiert. Des Weiteren auch Herzkreislauferkrankungen, Schädigung des Gefäßsystems und in Folge daraus vermehrt Herzinfarkte, Schlaganfall und Zuckerkrankheit.

Ich: Welche langfristigen Gesundheitlichen Folgen hat Rauchen insbesondere, wenn man bereits in der Jugend anfängt?

Sevelda: Das Hauptproblem des Jugendlichen Rauchens ist, dass man früh anfängt und dann nur noch in seltenen Fällen wieder aufhört. Dabei ist der Einstieg ja meist kein Suchtverhalten, sondern dass man wegen anderen Mechanismen und Faktoren mit dem Rauchen beginnt. Der jugendliche Körper ist besonders anfällig für die Schadstoffe zum einen, und wenn man früh anfängt hat man dann doch eine sehr lange Raucherkarriere. Üblicherweise sagt man, dass es meistens zehn Jahre dauert, bis der negative Einfluss des Rauchens neutralisiert wird. Beispielsweise wenn man mit 35 Jahren zum Rauchen aufhört ist man erst mit 45 so weit, dass man ähnlich gute Aussichten auf Gesundheit hat wie Nichtraucher. Dabei muss aber auch erwähnt werden, wenn man zu diesem Zeitpunkt bereits 20 Jahre geraucht hat, ist die Wahrscheinlichkeit, dass die Gesundheit bereits geschädigt wurde sehr groß und dies führt wiederum zu den bereits erwähnten Krankheiten.

Ich: In wie fern unterscheidet sich das Suchtpotential bzw. das Suchtverhalten von Jugendlichen von dem von Erwachsenen?

Sevelda: Das weiß ich nicht so genau. Ich denke nicht, dass sich das Suchtverhalten unterscheidet aber bei Jugendlichen… Man wird ja nicht als

nikotinsüchtig geboren. Also die Sucht entwickelt sich durch den Einstieg ins Rauchen. Also wenn man am Anfang raucht, obwohl es einem nicht schmeckt, und nur weil es schick ist, wird man im bestimmten Zeitraum eine Sucht entwickeln. Durch die typischen Einstiege von Jugendlichen wie zum Beispiel in Clubs, Bars, wo Gruppenzwang ein Thema ist, ist das Potenzial viel zu rauchen höher und daher auch das Suchtpotenzial.

Ich: Wie beurteilen Sie als Arzt den Trend Gelegenheitsraucher zu sein?

Sevelda: Ja, das höre ich sehr häufig, weil Rauchen bis vor kurzem wirklich als schick galt. Das ändert sich gerade und gerade in gut gebildeten Kreisen verzichten zunehmend Leute auf diesen Trend. Bei den Jugendlichen gibt es weiter das Problem, dass Rauchen als cool gilt und Gelegenheitsrauchen nur als Einstieg gilt. Die wenigsten Gelegenheitsraucher bleiben das auch. Die gesundheitlichen Folgen des gelegentlichen Rauchens werden sowie auch die des Passivrauchens oft unterschätzt.

Ich: Wie würden Sie die generelle Einstellung der ÖstereicherInnen, vor allem der jungen Bevölkerung gegenüber Rauchen beschreien?

Sevelda: Es wird besser. Den jungen Leuten wird zunehmend bewusst, dass Rauchen schädlich ist. Was es leider weiterhin gibt, ist der Gedanke, dass Rauchen ein Beigeschmack der Erwachsen Werdens ist. Deshalb greifen so viele Jugendliche zur Zigarette. Man fühlt sich älter und reifer.

Ich: In wie weit werden die Gesetzte zur Prävention bzw. zum Jugendschutz von den ÖstereicherInnen eingehalten und wie genau wird auf die Einhaltung der Gesetze geachtet?

Sevelda: Das ist ein sehr schwieriges Thema. Rauchen ist in Österreich schon vor dem 16. Lebensjahr verboten. Es gibt dabei ja auch eine Gesetzesänderung ab 2019, also erst am dem 18. Lebensjahr rauchen zu dürfen. Das hat aber offensichtlich nicht funktioniert, das zeigen uns Statistiken. Bei den bis 15-Jährigen gibt es bereits etwa 12%, die gelegentlich rauchen. Das zeigt, dass es in Österreich nicht gelungen ist diese Altersgrenzen einzuhalten. Ein 18-Jähriger unterscheidet sich kaum noch von einem 16-Jährigen. In Wahrheit gibt es in

Österreich auch keine Instanz, die das regelmäßig überprüft. Deshalb bin ich persönlich gegenüber solchen Verboten sehr skeptisch.

Ich: Wieso ist genau Österreich eines der führenden Länder in Europa, wenn es um Raucherzahlen bei Jugendlichen geht?

Sevelda: Warum das so ist, hängt sicher damit zusammen, dass es in vielen europäischen Ländern sehr viel strengere Gesetze und Maßnahmen gibt. Dabei ist das Rauchverbot in der Gastronomie ja nur eines von Vielen. Großbritannien beispielsweiße hat eine ganz restriktive Preispolitik. Also Zigaretten sind sehr teuer, doppelt so teuer wie in Österreich und das ist schon eine eindeutige Barriere für Jugendliche, wenn sie nicht so viel Geld zur Verfügung haben, sich Zigaretten zu kaufen.

Ich: Was muss der Staat Österreich ändern, um langfristig die Prävalenz des Rauchens bei Jugendlichen zu senken?

Sevelda: Ich glaube es bräuchte ein umfassendes politisches Konzept, um die Raucherzahlen in Österreich zumindest zu halbieren. Dabei sind viele Maßnahmen nötig: Information und Aufklärung ist natürlich eine – aber das ist bei weitem zu wenig. Ein Rauchverbot in der Gastronomie wäre ganz entscheidend. Jugendliche beginnen zu rauchen beim Weggehen am Abend, in der Gastronomie. Dort rauchen sie ihre ersten Zigaretten, dort entwickelt sich dieses Suchtverhalten. Man bestellt sich ein Getränk und ist es gewohnt nebenbei erstmal eine zu rauchen. Außerdem braucht es eine Preispolitik, die den Zigarettenpreis zumindest verdoppelt und es braucht eine permanente Arbeit an dem Imagewandel. In Amerika beispielsweise, ist die Schädlichkeit des Rauchens in den Köpfen so verankert, dass sich jeder Raucher schämt. In Österreich ist das nicht so. Das kann sich aber ändern, wenn Rauchprävention ein permanentes Thema ist. Dabei wird den jungen Menschen mehr bewusst, wie schädlich Rauchen ist und vielleicht achten Eltern auch mehr darauf, dass ihre Kinder nicht rauchen.

Ich: Wie beurteilen Sie persönlich die Entscheidungen der Bundesregierung zum Thema Rauchen?

Sevelda: Ich kann es nicht verstehen, die Bevölkerung kann es nicht verstehen. Das einzige Argument der Bundesregierung, das ein gutes ist, ist den Erhalt der persönlichen Freiheit. Das ist leider ein Argument, das viele nachvollziehen können, auch Nichtraucher. Allerdings muss man auch von einer anderen Seite betrachten. Mir ist es egal. Ich kann mir selbst aussuchen, in welches Lokal ich gehe. Aber warum ich es trotzdem für eine schreckliche Fehlentscheidung halte ist die Jugend. Die Jugend geht dorthin, wo was los ist. Und das ist dann meistens auch in Bars und Diskotheken, dort ist es lustig, aber leider sind auch genau dort die Raucher. Dann haben junge Leute die Wahl: Sind sie fad, oder eben dabei – dort wo geraucht wird. Deshalb wäre dieses generelle Rauchverbot in der Gastronomie so wichtig gewesen. Man müsste aktiv rausgehen um zu rauchen. Und ob das dann so viele Jugendlich machen ist fraglich. Man würde dabei zumindest verhindern andere durch Passivrauch zu schädigen.

Eidesstattliche Erklärung Vorwissenschaftliche Arbeit

Name:

Ich erkläre, dass ich diese vorwissenschaftliche Arbeit eigenständig angefertigt und nur die im Literaturverzeichnis angeführten Quellen und Hilfsmittel sowie auch ein von mir selbst durchgeführtes Interview benutzt habe.

Purkersdorf, 15.01.2018 Katalin Widmann e.h.

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