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“Cigarettes are priority”: A qualitative study of how Australian socioeconomically disadvantaged smokers respond to rising cigarette prices

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ABSTRACT

Despite substantial modelling research assessing the impact of cigarette taxes on smoking rates across income groups, few studies have examined the broader financial effects and unintended consequences on very low-income smokers. This study explored how socioeconomically disadvantaged smokers in a high-income country manage smoking costs on limited budgets. Semi-structured face-to-face interviews were conducted with 20 smokers recruited from a welfare organisation in NSW, Australia. Participants discussed perceived impact of tobacco costs on their essential household expenditure, smoking behaviour and quit cognitions. Interviews were audio-taped, transcribed verbatim and analysed using thematic framework analysis. Instances of smoking-induced deprivation and financial stress, such as going without meals, substituting food choices, and paying bills late in order to purchase cigarettes were reported as routine experiences. Price-minimisation strategies and sharing tobacco resources within social networks helped maintain smoking. Participants reported tobacco price increases were good for preventing uptake, and that larger price rises and subsidised cessation aids were needed to help them quit. Socioeconomically disadvantaged smokers engage in behaviours that exacerbate deprivation to maintain smoking, despite the consequences. These data do not suggest a need to avoid tobacco taxation, rather a need to consider how better to assist socioeconomically disadvantaged smokers who struggle to quit.

INTRODUCTION

Economic modelling studies suggest taxation may be particularly effective in reducing tobacco use among socioeconomically disadvantaged smokers who have among the highest smoking rates and appear to be the most price sensitive [1, 2]. However despite substantial price rises in many countries, there remains a social gradient with an inverse relationship between income level and tobacco use [3] and few studies have assessed the wider and unintended consequences of tobacco costs on highly disadvantaged smokers, particularly using qualitative methodologies. Examining the experiences and perceptions of disadvantaged smokers may help guide the development of complimentary strategies for those who are financially stressed to further strengthen taxation and pricing reforms.

Price-minimisation strategies can be used to maintain and manage the rising cost of smoking. Strategies include switching to cheaper brands, products, or sources (including illicit sources) of tobacco or purchasing in bulk [4]. Smokers who engage in the use of price-minimisation strategies are less likely to make quit attempts or to successfully quit [4]. Additionally, socioeconomically disadvantaged smokers are more likely to engage in one or more price-minimisation strategies [5]. In tightly regulated markets such as Australia's, opportunities for purchasing lower taxed and untaxed tobacco are limited and buying in bulk attracts few discounts. It is unlikely that use of these traditional price-minimisation strategies alone is enough to manage the rising cost of smoking among highly disadvantaged smokers living at or below the poverty line.

Price increases may disproportionately burden low-income smokers in unintended ways. Low-income smokers in the US [6] and low socioeconomic status (SES) households in Australia [7] spend significantly more of their household funds on tobacco than their more

advantaged counterparts. In general, smokers are more likely to have lower levels of material well-being compared to those who have quit successfully [8], and smoker-households are less likely to spend money on restaurant food and health insurance [9]. This is likely to be more exaggerated among socially disadvantaged smokers who are more likely to experience smoking-induced deprivation, spending income on tobacco in place of household essentials like food [10, 11]. Substantial evidence suggests that socioeconomically disadvantaged smokers experience higher levels of financial stress associated with their socioeconomic position, which inhibits cessation attempts [12, 13] and success [14].

Behavioural economic theories such as the “imperfectly rational addiction model” [15] suggest not all smokers would intend to quit, even at very high tobacco prices. Both the social and cultural context of smoking, as well as individual factors may keep low SES smokers from quitting. Research into the dynamics of smoking in large social networks suggests that as smoking prevalence has decreased over time, smokers have clustered together and moved to the periphery of social networks [16]. Qualitative studies have illustrated that low socioeconomic areas are more permissive of and conducive to smoking behaviours [17-19]. Smoking is also perceived as an important means of social interaction and a way of coping with the stressors of personal circumstances and surrounding environments [17-19], even though non-smokers have lower stress levels than smokers generally [20]. On an individual level, low-income smokers are more likely than high-income smokers to have shorter planning horizons [21], and low SES smokers tend to be more present-oriented and impulsive (inability to delay gratification) than high SES smokers [22]. These factors may help explain why financially stressed smokers experiencing material deprivation and hardship find it harder to achieve cessation and continue smoking despite tobacco price increases, however further research is needed because of the lack of qualitative study in the area.

While substantial research supports increasing tobacco taxes to achieve cessation among low SES groups [1], few have explored the resulting experience of deprivation and financial stress among those who maintain smoking. Highly disadvantaged groups face significant tobacco-related health and welfare inequalities, and there is a need to understand the strategies these groups use to maintain smoking in order to develop socially responsible policy. The aim of this project was to gain a fuller understanding of how smokers who experience multiple and high levels of social and financial disadvantage conceptualise, manage and respond to the increasing costs of smoking. Of particular interest were the perceived effects of rising tobacco costs on essential household expenditures, smoking behaviour and quit cognitions.

METHODS

Design

In-depth, semi-structured face-to-face interviews and a brief exit survey were conducted with clients of a social and community service organisation (SCSO) who were current smokers.

Data was collected in November and December 2012. University of Newcastle Human Research Ethics Committee approved this study.

Setting

The SCSO is a large, non-government, not-for-profit organisation providing welfare and financial aid assistance services to disadvantaged members of the local community. Socially disadvantaged groups such as the long-term unemployed, people with a mental illness, the homeless and Aboriginal and Torres Strait Islanders are over-represented as SCSO service users [23]. The SCSO services a broad catchment area in south-western Sydney, New South Wales, Australia.

In Australia at the time of the study the cheapest recommended retail price for a 25-pack of cigarettes was AUD15.40 and AUD19.95 for a 30g pouch of tobacco [24].

Sample

Purposive sampling strategy was used to recruit highly socially disadvantaged smokers. A convenience sample was recruited via a registry of participant contact details from individuals who had participated in a quantitative survey conducted by the research team at the same SCSO site [25]. Participants were attending the service for an Emergency Relief appointment (provision of financial and food aid), aged over 18 years, able to speak and comprehend English and were identified as current smokers during a quantitative survey about the price of tobacco.

Procedure

The research assistant (RA), made telephone contact with potential participants and invited them to participate in an interview on their perceptions of the price of cigarettes. The study was conducted onsite in a private room at the SCSO. The RA conducted the interviews. One author (AG) co-facilitated the first two interviews, and then reviewed subsequent interview audio to provide on-going feedback to the RA. Interviewing continued until saturation of themes was reached. Interviews were audio-taped and lasted an average of 30 minutes. Participants completed a brief survey at the end of the interview. All participants were offered the opportunity to review or remove comments from the audio. Participants received AUD\$50 grocery voucher as reimbursement.

Measures

The interview schedule was developed with consideration of two sources of information. Firstly, the available literature was reviewed to ensure the schedule included the primary themes cited in the existing evidence base such as price-minimisation strategies, smoking-induced deprivation, financial stress and experience of tobacco price rises. Secondly, the schedule development was also influenced by the results of a quantitative survey conducted by the authors prior to this study to ensure that results obtained in the large survey were further explored during these interviews. Interviews began with questions about participants' current tobacco use and expenditure, where tobacco fitted within personal budgets, and how tobacco costs impacted on smoking behaviour and household spending. A brief exit survey assessed: gender, age, Indigenous status, income, income source, marital status, education and housing.

Analysis

Interviews were recorded and transcribed verbatim and checked for correctness by one author (AG). Data were analysed using thematic analysis by one author (AG) using NVivo version 10. To establish inter-rater reliability an independent researcher separately coded 25% of transcripts, and identified themes were compared and reconciled where necessary. Braun and Clarke's [26] approach to thematic analysis was used, following a realist paradigm, considering meanings across the entire dataset and identifying semantic themes. Quotes are presented to illustrate key themes; identifiers are gender and age.

RESULTS

Sample

In total, 57 people were called; 20 were unreachable, and six had an inactive telephone number. Of the 31 who could be contacted, six declined to participate and 25 scheduled an

interview. Twenty interviews were successfully completed (65% response rate). Table 1 presents the demographic details of the 20 current smokers who participated. None of the participants received income from paid work; all were dependent on government benefits.

Current tobacco use behaviour

About two-thirds of the sample reported smoking ≥ 20 cigarettes per day. The price of cigarettes was the dominant factor for purchasing decisions. Participants reported selecting cigarette brand based on the least expensive pack available, purchasing from the cheapest available source which in this case is either the supermarket or a tobacconist. Most said they purchased tobacco as they needed it. When asked about their tobacco expenditure, 45% of participants reported spending between AUD\$50-\$80/week, while a further 35% spent between AUD\$81-\$150. Most estimated their tobacco expenditure was 25%-35% of their total personal income. Half of the sample reported never having considered the amount of money they spent on tobacco relative to their income.

Essential expenditure and cigarette price rises

Management of finances

Most participants reported dealing with expenses as they arose, describing limited use of formal budgeting and financial planning. Putting money aside for savings was not seen as possible *“There’s no way for me to save money...I don’t have any extra money to save”* (F27), and many expressed poor impulse control with their money *“I get paid on a Monday then every Monday I’ll give my grandparents money to hold for me until the Friday so it’s not sitting in my wallet so we’ve got money for the weekend”* (F29). Rent, bills, groceries and cigarettes were the most common expenses reported by participants. Most participants reported using a government-initiated direct debiting system that automatically deducted rent

and nominated utility bills from their welfare payments. The remaining money was then used to cover day-to-day living expenses *“Everything’s coming out like bills, my rent, my bills. Everything comes out automatically so then what I’m left with is my food, like kids’ stuff, like school excursions, cigarettes. They’re the only things that I have left to pay for once all my bills are paid...”* (F27). Overall financial behaviour seemed to be largely reactive.

Essential household expenditure was dealt with on a “pay-check to pay-check” basis. As such, most lacked awareness of where the extra money to pay for increasing tobacco costs came from, simply adapting to higher prices *“...when we can’t afford it so much, that’s when we have to just cut down and we found that, well then, when we can afford it, we just slowly, sort of, starts creeping back up again”* (F33) and *“To be honest I’d probably pay that extra...So just say my budget’s \$77 [for cigarettes/week] if it was an extra \$10 I would pay the \$87 or the \$97”* (M47). There was a sense given that for those who intended to continue smoking despite rising costs, it didn’t matter where the money came from.

Cigarettes are a protected purchase

Sacrificing essential household spending to maintain smoking behaviour was common. Half the sample were forthcoming about prioritising cigarettes: *“I’ll sacrifice other stuff before I’ll sacrifice my smokes”* (M47) and *“I’d put no matter what to get them cigarettes. Cigarettes are priority”* (M48). As such, for these smokers cigarettes were the priority purchase after getting paid *“Normally buy me smokes then do my groceries”* (M35). The other half of the sample reported covering essential household expenses before purchasing cigarettes *“...we go buy the food we need, see what money we’ve got at the end and then buy what smokes we can”* (F33) and *“...I mean sometimes I smoke less because...I’ve got to buy, yeah other stuff so other bills have come in”* (M49). These smokers were adamant they did not compromise

essential household spending for smoking but were aware this type of sacrifice occurred within their community *“Most will give up other things I think...For me I’ll cut back or cut out. But that’s just for me”* (F65). Regardless of whether they were the first or last purchase in the pay cycle, cigarettes were a primary item of expenditure.

Influence of rising smoking costs on essential spending

Participants were generally aware that their cigarette expenditure impacted spending in other areas *“Not that they [participant’s children] missed out on clothes or food or anything like that but they do miss out on the outings if we smoke”* (F31). Participants listed late bill payments, going without meals and having insufficient money for petrol, clothing, alcohol and family leisure activities as some of the ways rising smoking costs impacted on other spending. When identifying specific examples of cuts to household spending, distinct differences emerged between smokers’ accounts of what they observed happening in their community compared with their own behaviour. Participants were forthcoming with examples of others’ sacrifice:

“They’ve [neighbours] stopped their normal routine that they used to have, weekly shopping and going out and getting the things they want, petrol, things like that, cigarettes have taken over their budget” (F27).

“you see that all the time, especially in our area where we are...you see kids not eating and parents are smoking” (M49).

However, they contrasted their own instances of sacrifice with examples that they considered to be worse:

“Yes friends of mine will not get their groceries so they can get their smokes...they get behind in their bills. I mean I’ve been behind in my bills before, bills but not food. We refuse to...” (F31).

There was a reciprocal relationship between the stress of not having enough money to cover household essentials and smoking “*Sometimes I’ve been in a situation where it’s like should I buy meals or buy smokes... Whatever way like obviously if you’ve got no money and you’ve got no milk you’re stressing out, so I buy smokes*” (M30). An exasperation with their financial situation led to a mismanagement of funds for some smokers “*...you get to the point where you’re like, ‘OK, I’ve got \$20 left, I can either put that on the electricity...or I can go and buy a packet of cigarettes.’ ... The way that you’re feeling, you’re thinking ‘I’d rather go buy the packet of cigarettes. I’ll put the \$20 on it next week’*” (F33). The solution for some was to rely on food vouchers from community welfare organisations “*that’s why I’m here, that’s why I come to [SCSO name] because it helps us out with food so then I can buy enough smokes to survive*” (M48).

Throughout discussions participants expressed disappointment regarding their cigarette expenditure “*It appals me. That I could still smoke. I hate it*” (F29) and “*I know that we could do a lot better things with that money*” (F31). This may have motivated some participants to distance themselves from what they considered to be less than ideal behaviour. In all accounts, whether personal experience or examples of family, friends and neighbours, participants described the serious impact rising smoking costs has on essential household spending as a common problem among their communities. Some speculated that increasing tobacco costs would lead to smokers ending up “*in debt*” (F33), “*homeless or starving*” (F27), or reduced to crime “*I’ve heard people say eventually if they keep putting it up it’s just going to make them steal to get more*” (F27). The seriousness of these outcomes indicates the strength of addiction as well as the importance of smoking to these individuals.

Smoking behaviour

For many participants smoking was a shared experience that established a sense of community and formed an integral part of social behaviour. Sharing, swapping, trading or borrowing cigarettes was common among participants “... *we all smoke, we all share smokes too, if one hasn't got one, give me a smoke. There's one mother tells me, I owe you a packet, then she hit me up the other day, I gave her a handful, she goes I don't want a handful, I only want one, I said take a handful, I'll be hitting you up by the end of the week anyway*” (F33). Overall these practices were framed using positive language such as ‘sharing’ and contributed to a sense of camaraderie among smokers. However, there was also a sense of disdain for anyone perceived to be taking advantage of this system by ‘bludging’ or ‘scabbing’ cigarettes. Smoking was the norm within participants’ social networks “*we've got family that all smoke too, so, you know...*” (F33). This meant that smokers could pool their resources and rely on their social networks for sharing or borrowing cigarettes to manage smoking throughout the household cash flow and spending cycle.

Price-minimisation strategies

Participants discussed numerous price-minimisation strategies used to manage the cost of smoking. Most had switched to cheaper cigarette brands in the past; however this strategy was no longer feasible “*because mine's pretty much the cheapest there is*” (F27). Switching from tailor-made cigarettes to roll-your-own tobacco was mentioned by most smokers, “*Yeah I'm smoking rollies this week and it does work out a lot cheaper...couldn't do it permanently though*” (F29). Reducing the number of cigarettes smoked per day by “*smoking half cigarettes instead of full ones*” (F21) or increasing the time between each cigarette were cited as ways to make cigarettes last longer and save money, however some were uncertain this was a long-lasting change “*I try that all the time, it doesn't really happen*” (F29) and “*I did*

try and cut down and I have changed my brands. I find I cut down for a little bit but then I just go back to my normal smoking routine” (F41). Collecting cigarette butts off the street was reported by three smokers as something they had seen others do “...*you’ll see them going and taking butts from the cigarettes and then, oh, you’d just want to do without...*” (F33). Overall, it appeared that the use of price-minimisation strategies was a way to stretch out tobacco supplies when money was tight. Although participants perceived these strategies to be temporary changes to their smoking behaviour, they usually occurred at the end of a pay cycle indicating they were being made on a regular basis and likely formed part of their smoking routine.

Illicit tobacco

Awareness of illicit tobacco was high and most had tried it in the past. However, it was not considered a regular option. This was true of black market cigarettes “*It’s a lucky dip with them, I mean you don’t know what flavour, what brand you’re getting, what percentage of nicotine*” (M47), and ‘chop chop’ (illicit loose tobacco) “...*anybody can add anything to that and you wouldn’t know what’s in it*” (F29). Many disliked the taste of illicit tobacco and, ironically, worried about the tobacco quality and health risks.

Quit cognitions

Prevention vs. cessation

The sample was divided on whether increasing tobacco prices would help smokers to quit, although recognised its merit as a prevention strategy. “*If that’s the only thing that’s going to really help yeah I think it is fair. And it stops a lot of the young ones from taking up smoking too because they can’t afford to smoke*” (F41). Some thought price increases would be particularly useful for preventing uptake of smoking among youth.

In terms of cessation, some participants thought price increases would encourage smokers to consider quitting *“I mean people are going to get cranky at first, myself included, but yeah at the end of the day it’s going to help”* (F41). Others thought *“if you smoke you smoke, you’re not going to quit just ‘cause of the price”* (F33) or that price increases were a routine part of smoking *“If they go up people complain for a couple of weeks, you know I can’t believe that went up so much. But after a while it becomes routine. Sort of like that’s life, they’re going to go up again”* (F29). Complaints were made that increasing cigarette taxes was *“a revenue grabbing sort of exercise, instead of a quit smoking exercise”* (M35). Although some saw the potential prevention and cessation-related benefits to increasing tobacco prices, many accepted price increases as part of the smoking routine.

Quit assistance

Overwhelmingly, participants reported that smokers needed more help to quit. Overall, when discussing cigarette prices being used to encourage smoking cessation, participant’s expressed a sense of longing for the decision to quit to be taken out of the individual’s hand *“to be honest if they went up to the point where I could not afford them, like if it was going to cost me \$30 for a packet of 40s I’d probably be grateful...if a pack of 25s cost about \$20...would be ridiculous, I would have no other option but to quit”* (F29), or *“Around about \$35/\$40...That would be enough for me. That’s when I’d be seeing my doctor and going either give me something real cheap so I can get off it or I’m going to be sick of this you know I’ll put myself in hospital and stop the cravings...and just detox. I won’t pay that, that is jokeable”* (M48). These positions may be indicative of a hope that at some point the cost of smoking will outweigh the addiction and difficulty of quitting. However, given the study

sample were long-term smokers who have continually absorbed the increasing costs of smoking over time, these critical price points should be interpreted with caution.

Participants seemed to perceive policy-makers as having the capacity to increase the provision of smoking cessation care and initiatives and that they should be doing more to help: *“the money that the government gets for tax on cigarettes is nowhere near the money that they put into fighting people to quit”* (M35). The affordability of cessation aids such as nicotine replacement therapy (NRT) was mentioned by a number of smokers *“Some of the things that you do buy to stop smoking are just as costly as cigarettes anyway...A lot of people, they’d say I’d rather buy a packet of cigarettes than spend that \$10 on the gum.”* (F35). Others suggested *“outlaw it”* (F33), *“stop making them”* (F29), have *“more health things about it...more things on TV”* (M49), or use larger cigarette price increases *“I think it’s moving too slow but the increase, I think it has warned a lot of people, but it’s not warning enough”* (F27). There was a pervasive belief that governments could be doing more and in particular that proceeds of tobacco price increases could be used to provide more assistance to help people quit.

DISCUSSION

This study explored how socioeconomically disadvantaged smokers conceptualise, manage and respond to the increasing cost of smoking. Participants reported reducing essential household spending, using price-minimisation strategies, and sharing, trading and swapping tobacco supplies within their social networks to manage the increasing price of tobacco. There were conflicting opinions over prices being used to encourage quitting, although participants agreed that smokers needed more help to quit. Reducing the cost of cessation aids was repeatedly suggested as a way to promote cessation. Many low SES smokers quit as

a result of increased tobacco taxation [1], making tobacco taxation an important tobacco control tool. Understanding the behaviour of those who do not quit is important in planning how tobacco taxation increases may impact on those who struggle to quit, and assist in planning a more coordinated approach to achieving the greatest possible community benefit from tobacco control efforts.

The evidence indicates some socially disadvantaged smokers will reduce essential household spending to maintain smoking on a budget that is already limited. The majority of the sample were living below or on the Australian poverty line [27]. Although we had no comparison group, experiences reported in the current study are supportive of previous financial stress research findings that low SES smokers spend higher proportions of their income on tobacco [6, 7] and have poorer material well-being [8] than smokers in higher socioeconomic positions. In our sample, most smokers estimated spending 25% - 35% of their income on cigarettes, which was often at the expense of other essential household spending on bills, groceries, clothing and family activities. Smoking on limited budgets was the norm in these participants' social context. These behaviours are likely to compound existing levels of social exclusion and deprivation. Smoking is positively related to the experience of financial hardship, which in turn is associated with unsuccessful cessation; increases to the cost of tobacco may contribute to this cycle. As previously suggested by Siahpush *et al.*, [13] health and social policies should be developed in tandem to relieve circumstances of hardship. There is a lack of understanding about the strategies used by socially disadvantaged groups living on or below the poverty line to maintain smoking despite increasing prices. In previous quantitative survey research, disadvantaged smokers endorsed price-minimisation strategies such as switching to cheaper brands and reducing consumption as ways to manage rising tobacco costs [28]. These behaviours were discussed and elaborated on in the current study.

Participants reported use of these price-minimisation strategies appeared to be situation specific. Strategies were used when money was tight, but smoking behaviour tended to return to normal at the beginning of the pay cycle. Furthermore, these traditional cost-cutting measures were not enough to maintain smoking behaviours. A small number of participants also mentioned relying on the SCSO to provide their food, which may contribute to increasing pressure on foodbanks. Participants were concerned for the wellbeing of members of their community. They worried that if prices continued to increase this would further exacerbate experiences of deprivation and potentially lead to socially undesirable behaviour and/or illegal activity.

In the current study, participant accounts demonstrate shared experiences that appeared to contribute to a sense of camaraderie. Within a social context where smoking is the norm, participants found support within their communities and social networks to maintain smoking. The shared experience of struggling to afford tobacco meant many pooled resources and relied on family and friends to share, trade and borrow cigarettes to get by. Social norms that are more conducive to pro-smoking attitudes and behaviours may contribute to the difficulty some smokers face in achieving successful cessation [17]. Compared to traditional price-minimisation strategies, these behaviours are harder to target via tobacco control policies. Future policies and clinical approaches may need to consider the best ways to engage a smoker's social networks to encourage and support cessation.

Many participants expressed a sense of helplessness toward quitting smoking. There is mixed evidence as to whether disadvantaged smokers are as interested in quitting as their more advantaged counterparts [29-31]. Recent research suggests that low SES smokers who exhibit an external locus of control, cognitive impulsiveness and steep delay discounting (strong

preference for smaller, immediate rewards over larger delayed rewards) are less likely to remain abstinent following cessation treatment [32]. Smokers in the present study expressed a wish for an external force to motivate cessation (e.g. larger price increases, stopping cigarette production), an inability to control personal expenditure, and refrained from purchasing cessation aids due to upfront costs. The cost of NRT has previously been identified as a barrier to cessation among socially disadvantaged smokers [33]. Previous research indicates that smokers are supportive of a dedicated tobacco tax when the revenue is used to help them quit [34]. Initiatives such as the promotion and provision of subsidised cessation aids, health warning campaigns and counselling programmes could accompany future price increases to offset the unintended negative consequences of the policy among low SES smokers.

This research provides insight into purchasing and budgeting patterns, and cigarette prioritisation of smokers who experience high levels of social and financial disadvantage in a high income country. However, as we specifically targeted highly disadvantaged smokers these findings cannot be generalised to the experience of the general smoking population. Additionally, the study conclusions may not be generalizable to low income countries. Socioeconomically disadvantaged smokers engage in behaviours that may compound their deprivation by reducing already limited essential household spending in order to maintain smoking as tobacco prices increase. Price-minimisation strategies are used on an as needed basis, usually at the end of a pay-cycle. Smokers also rely on a system of sharing and trading resources within their social networks to make cigarettes last longer or to cut costs in the short-term. Although these smokers are interested in quitting, they require more support to do so. Effective tobacco control policy requires a comprehensive approach where taxation should not be seen in isolation. Governments should consider providing and promoting

effective cessation aids and programs at the time of tobacco price increases to counter the negative consequences of rising costs and support quit attempts.

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