http://ijhpm.com
Int J Health Policy Manag 2015, 4(4), 221–227

doi 10.15171/ijhpm.2015.41

IJHPM International Journal of Health Policy and Management

Original Article

Exploring cigarette use among male migrant workers in Nigeria

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Abstract

Background: There is limited knowledge about the use of cigarettes by blacks outside the United States (U.S). Nigeria creates an opportunity to explore smoking behaviours, smoking cessation (nicotine dependence) and use of cigarettes in a country that has a large black population outside the U.S.

Methods: We conducted three Focus Group Discussions (FGDs) involving twenty-four male migrant workers who reported that they were current cigarette smokers. Interviews were audio-taped and transcribed.

Results: Four major themes namely: reasons for initiating and continuing to smoke cigarettes, factors affecting brand choice, barriers to quitting, effect of smoking mentholated cigarette brands were identified.

Conclusion: This study provides insight into the use of mentholated and non-mentholated cigarettes and suggests the need for further studies to explore smoking behavior among Nigerians.

Keywords: Mentholated, Cigarette, Smoking, African

Citation: Onigbogi OO, Karatu D, Sanusi S, Pratt R, Okuyemi K. Exploring cigarette use among male migrant workers in Nigeria. *Int J Health Policy Manag* 2015; 4: 221–227. doi: 10.15171/ijhpm.2015.41

Article History:
Received: 3 September 2014
Accepted: 22 February 2015
ePublished: 23 February 2015

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Key Messages

Implications for policy makers

- Findings from our study present practical barriers and provides a way out for policy-makers interested in interventions aimed at reducing smoking prevalence in similar populations in other parts of the world.
- Our findings also provide a baseline that Nigerian government agencies can utilize to plan interventions specific to this population in the country.
- Interested parties could also utilize our results to plan Focus Group Discussion (FGD) sessions to explore the basis of other public health challenges in migrant populations.

Implications for public

Our findings provide a lead that could assist public agencies interested in working with migrant groups in Nigeria. It also gives an opportunity for well-meaning members of the public and non-governmental agencies to intervene in smoking-cessation among this group.

Introduction

There are currently about 1.1 billion smokers in the world, 70% of whom are in low-income countries. There are estimates that over the next 50 years, 450 million may die because of tobacco use (1). Although there have been few studies on smoking in the general population, the prevalence of adults smoking in Nigeria has been severally estimated in studies with limited scope (2–4). There are also some hospital based and group specific studies on cigarette smoking in Nigeria due to socio-cultural differences among these groups (5,6).

National smoking prevalence among men in Sub-Saharan Africa vary from 20% to 60% and the annual cigarette consumption rates are on the rise for both men and women (7). Among Sub-Saharan African youth, rates of smoking range from 1.4% in Zimbabwe and 1.5% in Nigeria to 34.4% in Cape Town, South Africa, which is cause for concern (8).

Tobacco use is a growing problem in many African countries, often among the world's poorest, have less complete and possibly less accurate statistics than other regions of the world (9). Sub-Saharan Africa differs from other regions of the world because it is still in the early stages of the cigarette epidemic in which although the adult smoking prevalence is relatively low in comparison with developed countries, it has continued to rise including increasing prevalence among the youth and females (2).

Studies elsewhere have described the soothing effect of mentholated cigarettes because menthol stimulates cold receptors, with the sensation of coolness perceived in the mouth and lungs (10–12).

Studies have suggested that mentholated cigarettes may have a negative effect on nicotine addiction and smoking cessation, especially among youths and Blacks in the United States (U.S) (6–10). One of the most striking information about the use of mentholated cigarettes in the U.S. is that African Americans

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or Blacks predominantly smoke mentholated cigarettes (~80%) compared to white Americans (~20%).

Although, there is limited knowledge about the use of mentholated cigarettes by Blacks outside the U.S. As the country with a largest population of black persons and with its multi-ethnic population, Nigeria creates a unique opportunity to learn more about how use of mentholated is associated with smoking patterns, nicotine dependence, and smoking cessation.

This study focuses on the Sabongari ward in Mushin Local Government Area of Lagos, Nigeria where there is a high concentration of migrants from northern Nigeria. The aim of the study was to determine the smoking preference of migrants from northern Nigeria residing in Sabongari areas of Lagos (Southwestern Nigeria) with regard to use of mentholated and non-mentholated cigarettes and nicotine dependence.

Methods

Study setting

The study was conducted using a convenience sample of residents of Idi-Araba, Lagos in February and March 2012. Idi-Araba, one of the 14 wards in Mushin Local Government area is an autonomous community populated predominantly by the Hausa Fulani and other Ethnic minorities from the northern parts of Nigeria including – Nupe and Igala from North Central, and Beriberi from North Eastern Nigeria. This population of northerners have been found to have significantly high smoking rates in previous studies (2,3).

Study participants

We conducted three Focus Group Discussions (FGDs) among current cigarette smokers. Each FGD session had six participants making a total of twenty-four persons in all.

Eligibility criteria for the FGD include:

1) Self-reported smoking of cigarettes for at least 5 days in a week for the past 3 months; and

2) Residence within the Idi-Araba community over the past 3 months prior to the study.

Exclusion criterion for the study include: presence of obvious tobacco-related health condition.

The youth leaders of the community who had been given the task of facilitating the research process then assisted the researchers in recruiting potential participants and organize the interviews and FGDs. Twenty four participants were recruited to participate in the FGD sessions. All potential participants who were approached agreed to be a part of the study. The youth leaders also assisted in the process of explaining the research objectives and protocol to the respondents and obtaining both verbal and written informed consent from them. The interviews were conducted at the convenience of the kiosk grocers over a two-month period. The interviews were all conducted in Hausa language which is the predominant language spoken by northern Nigerians. The FGDs were conducted in a central community information center while the interviews were conducted in the kiosks of the participants.

The Moderator's guide used across all groups was standardized. The groups had participants of similar age and socio-economic status. The Hausa youth leaders helped in the recruitment while 2 Hausa-speaking co-researchers who were resident doctors in the teaching hospital worked as the Moderator and the Recorder.

Focus Group Discussions (FGDs)

The FGD sessions were conducted among smokers to explore smoking patterns with a focus on the preference for mentholated cigarettes in this population. There were 8 male smokers recruited into each of the three groups. All participants were males because the level of interaction with females required to conduct the FGD was not permitted by the leaders of the community for cultural reasons. Focus groups were stratified by age including youth (aged < 21 years), young adults/middle age (aged 22–50 years), and the elderly (aged > 50 years). This design took into consideration the fact that cultural norms may not permit younger people to freely express their views when older folks are present.

The FGDs were conducted in enclosed locations within the community and were facilitated by 3 trained community youth leaders and lasted about 90 minutes each. The Moderator's guide for the FGD was designed by the investigators and translated into Hausa which is the language widely spoken by the majority of residents of the area. It was thereafter back-translated to English to ensure that the original meanings were retained. The questions were asked by one of the Hausa-speaking researchers who served as the Moderator while the other served as the Recorder and Note taker. The interviews were audio-taped and the transcription was carried out by the researchers.

Coding of transcripts for both the FGDs was manually done by the Principal Investigator (PI) and two researchers. A primary Hausa speaker who was the FGD moderator proofread each transcript using the audiotape recordings and the notes taken by the Assistant moderator/note taker to ensure completion and generate a series of codes. All transcripts were coded as a team, which included one of the PIs and two graduate physician research assistants.

The focus group and transcripts were the main data sources. The analysis was conducted in four steps beginnings with transcription of the FGDs, coding of the transcripts, summarizing and reporting the findings. The transcripts were analyzed to ensure that codes for the meaning, condensation of the meaning and interpreting the meaning was in line with suggestions from other researchers as detailed in a previous publication (13). Comments were coded only when they were heard for the first time with subsequent similar responses or points made to buttress the comments not coded.

To determine reliability, the number of agreements was divided by total number of agreements and disagreements among the two people who did the coding. There was an initial 90% agreement. Three meetings were then hosted to resolve the disagreements.

We abridged some meanings expressed by the interviewees and condensed them to shorter forms (14,15). We also used pattern coding to reduce the volume and generate smaller number of analytic units from the larger data while thematic units derived from remaining transcripts were compared with existing data in order to classify them. Data from the field notes were coded similarly. Data analysis involved searching for salient parts of the data and analyzing them by comparing

with the outcomes of the primary data source.

Results

Our results are presented in a manner that shows an effort to go farther than merely listing subjects brought up by participants. We have moved on to describe the pattern of responses that we discerned from the topics raised. The results are enumerated below with some emphasis in the latter parts on qualifying them based on our interpretation and addition of quotes in the actual word of participants. We have also included footnotes in order to tie together the identified themes.

The socio-economic distribution of respondents is presented in Table 1. Participants consisted mainly of manual labourers or handymen. Most of the young men were single with all the participants between 22 and 50 years reporting that they were currently in a marital relationship. The mean age of respondents was 27 ± 6 years with a age ranging from 17 years to 63 years.

Four main categories emerged in the process of coding and data analysis:

(a) Reasons for initiating and continuing to smoke cigarettes;
(b) Factors affecting brand choices;
(c) Barriers to quitting;
(d) Effect of smoking mentholated cigarette brands.

Reasons for initiating and continuing to smoke cigarettes

The smokers were asked to explain how they took the first cigarette and what factors might be responsible for their continuing to smoke. Most of the respondents emphasized the sense of "trying to belong". The sense of belonging that people had for their peers and the need to be accepted made it acceptable to solicit for cigarettes openly by asking younger ones to go get the products. For instance, one of the smokers, S1 (aged 20 years) stated that wanting to fit in with others:

"It would have been hard not to try smoking at the time I tried. I was always being sent to buy by older brothers and neighbors. I wondered what was in the stick that everyone liked. I noticed they all never sent me to buy the same food, but the smoking seemed to be a rallying ground for them all" (S1).

Others in the focus group agreed that the desire to start smoking was initially a way to fit into the mainstream of adults.

"It is impossible to grow up here and not smoke, the older boys make it sound like it is an adult thing but this increases the attraction especially for boys coming of age" (S2).

While they may not have initially liked the taste and smoked intermittently for a while, they ultimately became regular smokers and presently seemed to enjoy the calming effect of smoking. Some of the smokers also spoke along the notion of 'no penalty for first time smokers'. Some respondents shared experiences about being seen to have 'come of age' because they dared to smoke openly at some point.

"I was of a smaller physical stature than my peers and feared that many older people in the community would frown at my smoking. My peers who had started smoking openly forced me to do so openly one afternoon. To my surprise, no one seemed to care. It was a way of saying 'I have arrived to the outer world'. Afterwards I started chasing girls openly knowing that they were not likely to judge me anymore by my little size but will know that I was an adult because I could smoke" (S2).

S2 (aged 20 years) further stated that this might have been connected with his continual use of cigarettes, because the cigarette stick kind of makes him feel "*more confident to chase girls and do 'bad things'*".

Smoking for the first time also followed the theme of 'conferring earning capacity on the smoker'. Certain respondents spoke about how many associated cigarette smoking with having more disposable income which to them was a sign of relative prosperity.

"Although purchase of sticks of cigarette are within the reach of many of us, there is always a feeling of having money when someone always seems to have a cigarette with him, especially if he has a pack to share or always smokes in packs" (S3).

In this regards S4 agreed saying he sometimes keeps empty packs in his pocket and then buys single sticks with which he loads the packs and so it may not be strange for him to see someone pull out a cheaper cigarette brand from the pack of a more expensive one. Two other respondents S5 (18 years) and S6 (19 years) were most excited about this point and both agreed that it was 'a part of being a big boy'.

"Women like it and men don't mind, so why shortchanging yourself by getting your lover snatched by someone who smokes a cheaper brand just because he can bring out the 'big boy' packs when he wants to smoke" (S5).

Furthermore, some of the smokers emphasized the theme of "sharing with your peers". In this regard, one of the participants stated,

"Starting smoking is associated with the willingness to share a cigarette with friends" (S6).

Two respondents supported this idea by expressing how much

Table 1. Socio-demographic characteristics of FGDs participants (N= 24)

Characteristic	Number (%)
Ethnicity	
Hausa	19 (79.0)
Nupe	5 (21.0)
Education	
None	4 (16.7)
Arabic school only	3 (12.5)
Completed primary	6 (25.0)
Some secondary	6 (25.0)
Completed secondary	4 (16.7)
Tertiary	1 (4.1)
Occupation	
Unemployed	4 (16.7)
Student	5 (20.8)
Artisan	5 (20.8)
Manual labourer/handyman	10 (41.7)
Marital status	
Single	12 (50.0)
Married	10 (41.7)
Divorced/separated	2 (8.3)
Smoked first cigarette ≤30 min after waking up	15 (62.5)
Usually smoke mentholated cigarettes	5 (20.0)
Mean age	27 ± 6 years

FGDs= Focus Group Discussions.

cigarette smoking at an early age was associated with a rite of passage into adulthood. This attainment of adulthood is one that all youth tend to aspire unto:

"My first experience with smoking was at a tender age, when the bigger boys pass a lighted cigarette around, you do not have a choice than to smoke otherwise you would never be able to go out with them again" (S7).

"In matters about choice, at a certain age your group makes your choice for you. In this case the choice cannot be no otherwise the consequences would be grave" (S3).

In addition, a new theme which emphasized cohort influence related to intertribal camaraderie among youth.

"Our community consists of various tribes and peoples, sometimes showing that you share the passion and interest in a same product or brand could go a long way to reduce ethnic tension especially among the youth" (S7).

This point was supported with much enthusiasm by two other smokers who stated that:

"It is entirely true that with so much competition for menial jobs or passengers as it applies to commercial motorcycle riders, cigarettes have been used as means of resolving conflict and demonstrating the end of 'bad blood'".

"Sharing a stick of cigarette is the ultimate demonstration of humility which the holy book teaches, when you share a cigarette, you show that you are ready to forgive which reduces tension" (S8) (19 years).

The influential role of peer pressure, fitting in with the group and being 'old enough' cannot be overemphasized bearing in mind the comments from this group of youth. It would seem as if smoking initiation is arguably one of the ways of 'asserting' adulthood especially for the physically and psychologically disadvantaged young men.

Factors affecting brand choices

Regarding brand choices and brand loyalty, the themes that were identified revolved around the 'commitment of smokers to brands that their peers preferred and some that conferred a status on the smokers and were readily available'. One of the themes identified in the course of the interviews centered on 'brand identity based on age group'. Many respondents thought that certain brands were associated with older members of the community because they had been on sale for a number of years.

"My choice of brand has so much to do with what my guys", "I cannot smoke what they don't smoke especially when we hang out" (S10) (30 years).

"The mentholated cigarette brands confer a status of knowing what young people smoke" (S9) (25 years).

We also noticed that initial choice of brand was determined by peers but continual brand preference was determined by availability of funds.

"I smoked Benson when I was younger because that was what my friends smoked then, now I smoke London because it helps to clear my throat" (S13) (32 years).

The second theme that was identified in determining brand choices and brand loyalty was the 'availability of preferred brands in the open market' as stated by one respondent:

"Cigarettes with menthol taste are sometimes scarce which makes it hard to get them from sellers in my neighborhoods, when that happens" (S14) (31 years).

"I smoke other brands but they are less satisfying" (S14).

There was demonstrated enthusiasm in commenting.

"Not few of my friends have given up on some older brands that used to be available and gone for others, I don't expect that I would continue to smoke the same brand forever, although for now I like my Benson and Hedges" (S12) (41 years).

Within the context of 'peer influence'; it seemed that the smokers could do very little to change their preferred brands even if their cohorts did not exert any direct influence on them in their brand choices. Some participants stated that they started smoking because most of their friends were picking up particular brands and they wanted to "belong".

Respondent S15 had earlier experimented with different brands but could not really state why he settled for Rothman's, his preferred brand. Some other participants started experimenting when sent to buy cigarette by their senior brothers. The habit was initially infrequent but became continuous later and gives a sense of well-being.

Some others admitted that there was an air of confidence around smokers. Respondent S13 reported that he had experimented with White London (mentholated brand) but did not like it because it was "too strong" and caused him to expectorate a lot. This made him migrate to Rothman's before finally settling on Aspen which calms him during bouts of anger, and that Aspen (mentholated brand) confers a special status to those who smoke it.

At the early stages of commencing smoking, respondent S17 had used White London but discontinued because it made him sleepy. Respondent S12 had also used White London in the past.

"…It had a soothing effect on my throat but I later migrated to Benson and Hedges for no specific reason" (S12).

S18 (43 years) had initially started smoking Saint Morris (mentholated brand) but did not like it because it "controls him". He subsequently experimented with Rothman's prior to settling for Benson and Hedges. S18 had started smoking after he was sent to purchase cigarette and observing his "seniors", who encouraged him to "grow up" by smoking. He has a preference for Benson because it is the brand he started with.

Strong messages about brands that were acquired from smoking initiation with some brand migration observed based on real or perceived effects of the brands. Many of these perceived effects were as a result of marketing strategies especially as it concerned the mentholated cigarettes which are usually marketed as 'white brands' or 'strong brands'. The comments on smoking choices point to the fact that migration to other brands usually came with reasons and that people were more likely to stick to the brand of their initiation or similar brands. The youngest group of participants seemed to emphasize the peer-pressure effect which was still a key determinant of their smoking.

Barriers to quitting

With regards to quit methods that respondents were aware of or those in which they would likely adopt, the sub-themes highlighted include the use of prayer, fasting, chewing of bubble gum, use of deep breathing methods and avoidance of alcohol and visiting nightclubs.

"Prayer can do all things; it has worked for someone that is

my friend so I know that is what will make me stop" (S19).

Respondent S20 felt set times of fasting for religious reasons were the best times to quit smoking and expressed a wish to stop smoking during the next Ramadan fasting season. Respondent S11 had this line of thought.

"I can always stop when I want, I remember that I stop many habits during one of these seasons and so can stop anything during this period" (S20) (63 years).

There were no descriptions of institutional support in quitting smoking in the past. However, participants had received social support from partners, friends and parents. Social support reported include requirement to stop as a part of the marriage rite process.

Respondent S17 commented that he was still smoking despite many quit attempts.

"I frequent bars and 'bad places'" (S17).

Respondents S11 and S22 agreed stating that they had 'stopped' smoking but only smoke in bars and pubs which are not common in the neighborhood. S11 reported success with the 'quit' attempt due to his use of a method of deep breathing anytime he has the urge to smoke cigarettes of when he feels that there is too much work to do. Some respondents also linked smoking to their jobs and felt that their work routine especially in peak hours had become accustomed to smoking. A commercial motorcycle rider stated that he was already used to smoking after discharging non-smoking passengers.

Self-management approaches were adopted by some participants in an attempt to quit smoking. Many were unaware of any help from external sources and seem to have the feeling that their self-motivation without even the help of family members was enough to get them to quit. None of the participants however made any comment on previous quit successes based on the perceived methods neither was any comment made on previous short-term quit success by them. Participants who had their quotes form a key part of this theme were still in their prime with several quit attempts.

Effect of smoking mentholated cigarette brands

It was identified among the discussants that the price of cigarettes had an influence on choice of brand and that mentholated brands did confer a special status. They also concurred on having experimented with different brands at some points during their smoking history, and that the smoking habit generally incurs unnecessary expenditure.

Some respondents thought that mentholated brands of cigarette are addictive and are related to many diseases like cough, tuberculosis and asthma. Respondent S5 (18 years) said that "*I protect myself from the negative health effects by using Franol tablets periodically (Franol is an oral bronchodilator drug)*".

Smoking was described as a method of reducing stress and keeping up hope in extremely difficult circumstances that many had found themselves. This was universally echoed in the group with all individuals commenting on how well cigarettes can help reduce tension. The respondents also thought that the strong mentholated cigarettes could help in releasing energy to lifts heavy objects.

Another subtheme identified among respondents was that the mentholated cigarette brands increase mental alertness. According to some respondents smoking must have some 'effect' on the smoker. Respondent S13 stated that this was the 'effect' that endeared him to mentholated cigarettes in the first place. As he put it:

"…I used to feel that the cigarette I was smoking at that time had no 'effect' unlike the puff from friends who were smoking mentholated brands, so I switched" (S13).

When asked to describe this 'effect', the analogy was that of "*… something causing a slight spin in the eyes*" (S13).

Respondent S5 and S20 stated that they do not know any benefit derived from smoking and that in fact 'smoking causes a bad odor'. However, they continued to smoke the mentholated brands because these brands:

"Have no different smell and can be used with spicy perfume" (S5) and (S20).

A respondent stated that mentholated cigarettes make them less irritable and prevented them from engaging in little quarrels.

"I have always been inpatient and irritable, but when I take Aspen white, I cool down faster" (S9).

Some smokers thought that mentholated cigarettes help to aid food digestion. Respondent S3, S9 and S13 were in strong support of this assertion. Another respondent felt guilty that younger boys could become smokers because they engage in the habit.

"I will never send small boys to buy White London for me anymore" (S4).

He commented that he seems to have noticed that some of the boys had started smoking White London because he could perceive the menthol on two of them.

"…I feel guilty that I have encouraged them to start and it may be long before they stop taking White London" (S4).

There was some mixed feedback about mentholated cigarettes as being something that some actually avoid, and some seek for particular effects. Some of the physical and psychological effects highlighted by the participants above have been observed in other settings.

Discussion

This study was conducted among smokers in a migrant population in Lagos Nigeria. We sought to explore the smoking patterns especially as related to preference for mentholated cigarettes in this population. The peculiar circumstances regarding low socio-economic status that characterize migrant populations that reside in Sabongari areas and its effect on their smoking attitudes, behaviors make this work unique.

We found that 20% of smokers who had participated in the study were primary mentholated cigarette smokers. Although this rate is a lot less than that which have been reported in other studies (16–20). This is an interesting area for future research. Most participants had made an attempt to quit smoking but had no immediate motivation to do so. Previous studies have highlighted financial, social, and health-related reasons for quitting cigarette smoking with a number of personal, environmental barriers identified (14,16,20,21). However, the availability of a disposable income and the sale of cigarettes in single sticks among this population does not present any financial reason to many of the smokers to quit. The relatively high prevalence of smoking among this population and the anonymity associated with migrant

populations might have contributed to the social acceptability of smoking among adult males in this population.

The high prevalence of smoking among this mainly migrant population agrees with previous studies which have highlighted the fact that immediate physical survival needs often take the attention and priority over future concerns among underserved populations (20). The respondents seem to be more concerned about the short term health effects of smoking rather that the long term health effects. The level of influence from peers, group membership and coming of age are important findings too, as these things would be quite significant barriers to quitting.

Smoking was described as a method of reducing stress and managing difficult circumstances. The attraction of being able to exercise independence may also have been responsible for peer influence in the initiation of smoking among the population. Although, preference for mentholated cigarette (20%) among this population is a lot less than findings from the U.S. among African American smokers which puts the prevalence as 75% (7,22,23), the soothing effect of menthol and its ability to increase significantly involuntary breath holding have been described in previous studies call for concern (9,10,24–26). Breath holding at peak inspiration moments and the attendant attention that goes into it could be viewed as a strategy to while away time and create a sense of productivity among some of the smokers. This may provide the explanation for the relatively high prevalence of mentholated cigarette brands.

Limitations

This study has limitations that should be considered in interpretation of the findings. We used a convenience sample of smokers recruited into the study based on personal interest and the inclusion and exclusion criteria, therefore opinions expressed may not be reflective of the whole population. However, this does not invalidate our work because the research team made the best use of the knowledge of the Hausa language to try to get all participants to express themselves. Another major weakness of the present study is that it did not include female smokers.

Conclusion

This study provides insight into cigarette smoking in general and the use of mentholated and non-mentholated cigarettes in particular in a population consisting mainly of migrants from Northern Nigeria. The findings should guide interventions to reduce smoking behaviors among migrant groups in Nigeria. It opens a door of opportunity for further research for smoking researchers in this under-researched area.

Acknowledgments

Funding for this research was generated from the researchers.

Ethical issues

Ethical approval for this study was obtained from the Health Research and Ethics Committee of the Lagos University Teaching Hospital. The protocol for the ethical approval highlighted that the study would not give any money or material incentive to participants and that refusal would not attract any repercussions. Participants with some form of education were made to sign the written informed consent that had been explained to them in the Hausa language while illiterate participants thumb-printed the forms.

Competing interests

The authors declare that they have no competing interests.

Authors' contributions

OOO: Concept development and article write-up; KD and SS: FGD administration and article write-up; PR: Data analysis and article write-up; OK: Article write-up and overall supervision.

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