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RESEARCH ARTICLE

Peer Pressure and Early Adoption of Arecanut and Smokeless Tobacco Among Schoolchildren: A Cross-Sectional Study in Public Health Dentistry

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Abstract

Background: Early onset arecanut, ST use in children is a public health issue in India with significant implications for oral and general health. Peer pressure is a major factor in adolescent experimentation with these agents, but its importance among the pre-teen and young teen population is not well studied. **Aim:** This cross-sectional study aimed to correlate peer pressure with initiation of areca nut and smokeless tobacco among 10-15 years of school children. **Methods:** The study population comprised 1017 students consisting of 573 males (56.3%) and 444 females (43.7%) that were selected by stratified random sampling technique according to their schools. They were additionally inquired regarding arecanut/slt refusal based on a structured questionnaire, if offered by friends along with the extent of social permissiveness that is acceptability. **Results:** Around 82.9% expressed that they will "definitely not" accept arecanut from a best friend (χ^2, $p < 0.001$).

Keywords: Peer pressure- arecanut- smokeless tobacco- schoolchildren- cross-sectional study- public health dentistry

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Introduction

The early use of arecanut and smokeless tobacco in children is a growing public health problem, especially in South and Southeast Asia where cultural tolerance is high for using such substances. Arecanut, commonly chewed alone or mixed with tobacco in different forms, is integral to each social custom and considered safe by the vast majority [1]. Nevertheless, accumulating evidence has shown that even the early and sporadic use comes with health hazards such as the occurrence of oral submucous fibrosis (OSMF), premalignant lesions, and an increased lifetime risk of developing oral squamous cell carcinoma [1]. Children and adolescents are especially susceptible to influences from peers, media exposure, and family practices because of their emerging cognitive and psychosocial abilities [2].

There are major public health implications related to early usage of arecanut and smokeless tobacco. Smokeless tobacco use causes over 350,000 deaths per year worldwide, predominantly from oral cavity and pharyngeal cancers [3]. Smokeless tobacco use is also widely popular among adolescents in India, due to cultural acceptability and easy access; initiates has occurred commonly before they reach the age of 15 years [4]. This emphasises the need for control mechanisms against them in the school going age group.

Peer Influence and Behavioral Dynamics

Peer pressure is considered a major influence affecting teenage decision-making and behavior choice all over the world [5]. During the adolescent years, peer groups are paramount to identity development and risk and novelty seeking attitudes. Social learning theory suggests that behaviors, such as substance use, are acquired through observation and modeling of others (particularly peers) who model that the behavior promotes a higher social status or group membership [6]. Such is particularly important for arecanut and smokeless tobacco use, which may be shared among peer networks and perceived as

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signs of maturity, company or collaborative spirit [7].

Peer effects on tobacco uptake empirical studiesundoubtedly draw a clear picture of the significance of peer dynamics on tobacco initiation. Tobacco use experimentation among adolescents occurs more frequently if close friends are using or offering tobacco products without individual awareness for health risks [5]. Most initiation take place in non formal settings like school breaks or parties and tribe offerings are at once a social-experiment as well as an invitation for acceptance. Most children who believe that many of their friends smoke are several times more likely to begin smoking [8].

In addition, the susceptibility to peer influence may be gender-specific. Studies demonstrate that boys also experience more peer pressure to participate in risk actions, including tobacco use, consistent with social norms of masculinity and peer bonding [7]. Meanwhile, girls may face more subtle forms of social pressure related to appearance or social status. Comprehending these gendered dynamics is essential for the development of targeted prevention interventions.

Health Impact of Early Use

The health effects of early and persistent use of arecanut and smokeless tobacco are serious and varied. Chronic use results in oral submucous fibrosis, leukoplakia, and erythroplakia followed by the emergence of oral cancer, which presents one of the worst survival rates among cancers [9]. Carcinogenic potential of arecanut is well-documented and has been categorized as a Group 1 carcinogen [10]. Smokeless tobacco is related not only to oral health, but also systemic diseases including cardiovascular conditions, metabolic syndrome and reproductive defects [9].

Children are especially susceptible because of the developing oral mucosa and immunity. Early onset enables an increase in the cumulative lifetime exposure and further strengthens behavioral patterns that are very difficult to modify in adulthood [3]. Additionally, early adopters of smokeless tobacco frequently advance to more detrimental forms of tobacco use including smoking which may further increase the susceptibility to chronic diseases [2].

Rationale for the Study

The risks associated with arecanut and SLT are well documented, yet among Indian schoolchildren aged 10–15 years, little research has investigated the role peer influence plays in their initiation. The majority of current research is conducted on older adolescents or adults, neglecting the crucial period of early adolescence at which habits are established [4]. Further, although peer influence is recognized as a predictor of tobacco use in existing literature, there has been limited attempts to quantitatively estimate its effect on arecanut and smokeless tobacco use among school settings [7].

This paper aims to redress these gaps by examining the effect of peer pressure on schoolchildren's tendency towards experimentation with arecanut and SLT. By testing sex/gender differences and measuring individual attitudes about social acceptability, the study seeks to present findings for more appropriately designed interventions within school-based oral health initiatives. Understanding these relationships is critical for the creation of prevention strategies that not only teach, but also enable young people to resist peer pressure and make healthy decisions.

Objectives of the Study

Key Objectives of the Study The following summarizing objectives guide this study:

To estimate the prevalence of arecanut and smokeless tobacco experimentation among school students in the 10-15 years age group.

This will serve as baseline data on the magnitude of early exposure and initiation among the targeted age group.

To investigate the influence of peer pressure on usage behaviour.

The study will measure the influence of peer dynamics on initiation by studying acceptance and rejection of peer offers, and perceptions about social situations.

To examine sex variance in susceptibility to peer offers.

This would be helpful for developing gender-responsive intervention programmes targeted towards the identified vulnerabilities on boys and girls.

Literature Review

Early Initiation of Tobacco Habits

The use of tobacco products in childhood and early adolescence is associated with an increased risk of addiction and negative health effects. Initiation during adolescence (before age 15) greatly increases the likelihood of a regular smoker and challenges to quitting in later life [8]. Such premature exposure result in higher cumulative life-time risk of oral and systemic diseases like leukoplakia, oral submucous fibrosis, cancer of the oral cavity and pharynx. In beaucoup de régions du sud-asiatique, cet apprentissage ne se limite pas à la cigarette and s'étend jusqu'à léthiandiph (tabac sans fumée, let), au zézènoute (com) source d'accoutumance considérés comme moins nocifs mais tout aussi cancérogène tot [1]. The practice usually starts in casual social situations -- like schools, or through neighborhood networks -- and is sustained by peer pressure and societal expectations.

Peer Relationships and Social Learning Theory

Social influence is among the strongest predictors of tobacco initiation by youth. This is consistent with social learning theory, which suggests that behavior develops as a result of observing and having peers serve as models [6]. Adolescent experimentation with tobacco products is more common among those who witness their peers using these products and among those who are offered tobacco directly through social circles peer groups [5]. Offers from peers are frequently perceived as norms about social inclusion and saying 'no' may condition fear of rejection or being teased. Research shows that children with friends who use ST are between two to four times more likely to try the substances themselves [7]. The significance of peer pressure in the development of use behavior during these

early years is already well known.

South Asian Predilection and Social Acceptance of Arecanut

The social habit of arecanut chewing in South Asia makes prevention difficult. Arecanut, hospitality, religious observances and socialising Arecanut consumption is considered a norm even in many urban households [4]. Arecanut is grown in almost every village of these communities, and the children are exposed to its use by the family members and some parents or elders may even offer it unintentionally to their offspring, thereby inadvertently endorsing this habit. This pattern of testing can lead to early debut and initiation of smokeless tobacco products, which are commonly mixed with arecanut for flavor/enhanced dependence potential [9]. These cultural norms and values mitigates the extent to which the risk of use is perceived, leading to widespread uptake.

Public Health Strategies and Prevention in Schools

School-based interventions have successfully lowered the initiation of tobacco use among adolescents. Projects that educate about risks paired with resistance skill-building have had substantial success in delaying or preventing initiation [3]. Peer initiatives, in which student instead students are trained to be health advocates, have had particular success since they also harness the social dynamics that promote tobacco. Furthermore, incorporation of oral prevention education in school curriculum and inclusion of parents and community leaders can be helpful in reinforcing preventive message and development of supportive environment for behavioral change [2].

Lacunae in Research Relating to Pre-Adolescent Age Group

Although there is extensive research on the prevalence of adolescent tobacco use initiation, there has been less research on the early process for younger children; that is, pre-adolescent children or those aged 10–15 years. The majority of previous studies have been conducted in older adolescents or adults, with relatively little attention paid to the crucial phase during which response profiles are initially established [4]. In addition, little is studied regarding peer pressure in relation to arecanut and SLT use, particularly in the Indian context. Filling this gap is necessary in developing interventions that are age-specific, culturally-explicit and designed to reduce early initiation.

Methodology

Study Design

The aim of the study was to explore the influence of peers in early onset of arecanut and SLT use, which is course effect relationship oriented cross-sectional descriptive research design. A cross-sectional design was used to obtain an estimate of the prevalence of behaviors and factors associated with these behaviors in the target population at a single point in time [11]. In particular, it is appropriate for the detection of patterns, relationships and possible risk factors in such a way that will facilitate public health research on preventive interventions.

Study Population

The study population comprised of 1017 schoolchildren (10-15 years) of various private as well as public schools. This age range was selected because this is a sensitive and critical phase where behavioural attitudes such as healthy behaviour, may be formed and influenced by social determinants such as peer pressure [2]. Overall, 573 (56.3%) males and 444 (43.7%) females indicated a fairly even distribution of male vs female patients. Inclusion criteria Children in schools of reference, who were within the age limit for inclusion, and whose assent was obtained along with their parents' consent. Students who suffered from chronic diseases or cognitional impairments affecting completion of survey were excluded.

Sampling Method

The sample was stratified randomised and also sought representation of different types of schools and socio-economic background. Schools were divided in public and private ones; specialties (2) were randomly chosen from each. This approach minimized selection bias and enhanced the generalizability of results to the entire student population [12].

Data Collection Tool

Study tools Data were collected through a pre-tested structured proforma in similar setting to collect information on demographic characteristics, exposure to peer pressure and attitude of AN and SLT usages, disposition for experiments with the substances. The questionnaire was based on previously validated scales and instruments for tobacco use among adolescent [5] and pilot tested on 30 students for clarity, reliability, cultural acceptability. It involved closed-ended and multiple choice questions focussing on situations (e.g. offering/receiving arecanut, smokeless tobacco) and social comfort with use.

Variables

Predictors: Sex and offers by peers

Dependent Variables: Receptivity to arecanut or SLT offered by friends.

These covariates were chosen based on evidence from the literature that posited sex and peer-pressure as predictors of early tobacco experimentation [4, 7].

Data Collection Procedure

After obtaining ethical approval and informed consent from schools and parents, school hours data were gathered. To preserve anonymity and to reduce social desirability bias, the questionnaires were provided to students by experienced field researchers in day-light.

Statistical Analysis

The data was analyzed using SPSS software (version 24.0). Descriptive statistic (frequencies and percentages)

were used to summarize demographic aspects and response. Relationships of qualitative variables like gender with willingness to initiate arecanut or SLT use were examined using the Chi-square test. a level of significance at $p < 0.05$, in keeping with typical practice in public health research [13]. The chi-square tests showed the role of gender in susceptibility to peer pressure with tobacco use, evident in findings (arecanut offers $p < 0.001$ and SLT offers $p = 0.007$)

Results

Study Population And Demographics Describing the recruited cohorts (Section 5.7) and study baseline demographics were performed

The age distribution of the students is shown in (Figure 1). A total of one thousand and seventeen (573 boys) school children aged between 10-15 years were interviewed in this cross-sectional study. The number of 10-15 year old children was divided into two main groups: 499 (49.1%) students, aged 10-12 and 518 (50.9%), who were age13 to age15 years old (Table 1). This distribution constitutes a representative sample with an acceptable number of young and mid-adolescents, which is the population group most relevant for the study of behaviours related to peer influence and smoking.

Offer From Peers and Willingness to Chew Arecanut

On being questioned whether they would accept arecanut from a best friend, only 26.3% replied "definitely not" and 7.8% replied "probably not". Eight point four percent answered "probably yes" and 4.4% "definitely yes" indicating that nearly one in eight pupils might also have been influenced by peer pressure under this circumstance (Table 2) and Gender-wise variation in willingness to accept arecanut is presented in (Figure 2).

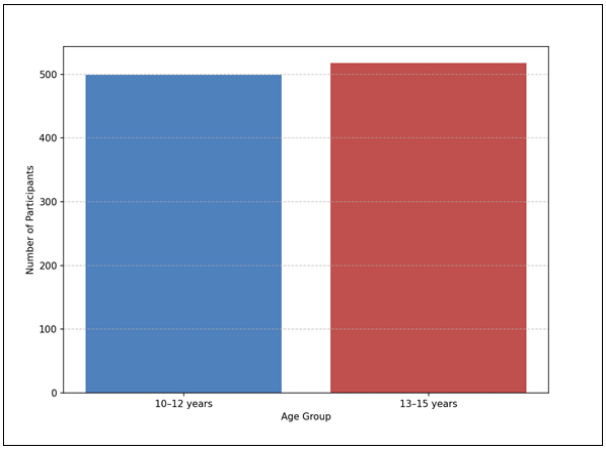

Figure 1. Age Distribution of Schoolchildren

Attitude to ST by peer group.To Table 2 posits that the attitude which one's peers have towards an individual's use of ST would slightly indicate that a friend uses ST than those with whom they are in competition.

Respondents were also asked if they believe people are more or less comfortable re smoking smokeless tobacco at events/parties. `Did not matter' if SLT is performed to NS was reported by the highest percent (56.9%), followed by 25.2% indicating it makes people "less comfortable"; approximately 17.9% agreed that they make "more comfortable" (Table 3) and Differences in perception of smokeless tobacco use during social gatherings are shown in (Figure 3).

Friend Offers and Attitude About Trying ST offers friends period attitude trying ST 6.

In an analogous smokeless tobacco-related question, 84.2% of students reported strong intent not to take smokeless from a close friend (p=not at all). (6.7 %) as

Table 1. Distribution of Responses on Peer Influence and Arecanut/Smokeless Tobacco Use Among Schoolchildren (n = 1017)

Variable	Categories	Male (n=573)	Female (n=444)	Total (n=1017)	% of Total
Age Group (years)	10–12	285	214	499	49.10
	13–15	288	230	518	50.90
Willingness to Accept Arecanut if Offered by Friend	Definitely not	457	386	843	82.90
	Probably not	21	23	44	4.30
	Probably yes	59	26	85	8.40
	Definitely yes	36	9	45	4.40
Perception of Smokeless Tobacco in Social Gatherings	More comfortable	112	70	182	17.90
	Less comfortable	141	115	256	25.20
	No difference	320	259	579	56.90
Willingness to Accept Smokeless Tobacco if Offered by Friend	Definitely not	484	372	856	84.20
	Probably not	34	34	68	6.70
	Probably yes	23	29	52	5.10
	Definitely yes	32	9	41	4.00

Pearson Chi-square for willingness to accept arecanut: $p < 0.001$ (significant); Pearson Chi-square for willingness to accept smokeless tobacco: $p = 0.007$ (significant); Pearson Chi-square for perception in social gatherings: $p = 0.296$ (not significant)

Table 1. Age Distribution of Schoolchildren (n = 1017) Aged 10–15 Years Participating in the Cross-Sectional Study

Age Group (years)	Number of Participants	Percentage of Total (%)
10–12 years	499	49.10
13–15 years	518	50.90
Total	1017	100.00

Note, Percentages are calculated out of total n = 1017 and rounded to one decimal

Table 2. Willingness to Accept Arecanut if Offered by a Friend (Gender-wise Distribution)

Response Category	Male (n = 573)	Female (n = 444)	Total (n = 1017)	Percentage of Total (%)
Definitely not	457	386	843	82.90
Probably not	21	23	44	4.30
Probably yes	59	26	85	8.40
Definitely yes	36	9	45	4.40

Note, Percentages are computed out of n = 1017 and rounded to one decimal place.

Table 3. Perception of Smokeless Tobacco Use in Social Gatherings (Gender-wise Distribution)

Perception Category	Male (n = 573)	Female (n = 444)	Total (n = 1017)	Percentage of Total (%)
More comfortable	112	70	182	17.90
Less comfortable	141	115	256	25.20
No difference	320	259	579	56.90

Note: Chi-square test for gender differences in perception: p = 0.296 (not significant). Percentages are out of n = 1017.

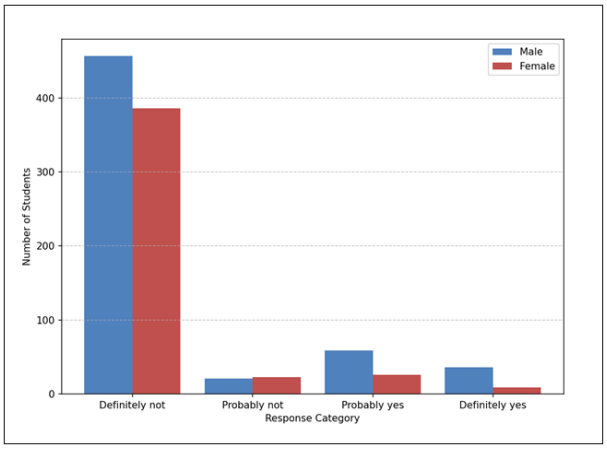

Figure 2. Willingness to Accept Arecanut (Gender-wise)

"probably not", "probably yes" for patients were both 5.1 % and "definitely yes" was 4.0 % (Table 4) and the gender distribution of willingness to accept smokeless tobacco is depicted in (Figure 4).

Peers and General Drug Use

Since all of the single tobacco substance domains (incentive to ever try arecanut or GS through friends) were in a single model differences odds for having ever experimented with one product could sometimes be 'mirrored' as increasing probabilities when assessing another. The sex-specific distribution was 83.6% "definitely no," 5.6% "probably no," 6.8% "probably yes" and 4.0% "definitely yes."

Figure 5 is a pie chart of distribution of total response, demonstrating that students are not pure rankers (it is rare for responses to spread out evenly over all questions), but about 11% are in the "probably yes" and "definitely yes" camps this population might be the target for intervention).

Chi-Square and Statistical Significance

Chi-square for main variables are presented in Table 5. Peer influence was the most significant predictor of uptake of arecanut and smokeless tobacco, but not sociability.

Interpretation of Findings

In school children the influence of peer pressure in experimentation with arecanut and smokeless tobacco can be appreciated. While the students were generally in agreement that they would not take up such offers, it was a bit too high to sound very low for 'at risk' students. At a minimum, it is as clear that simply experimenting with substance abuse as a teen increases the risk of future regular use and/or addiction for them then, and also if they should survive themselves into adulthood

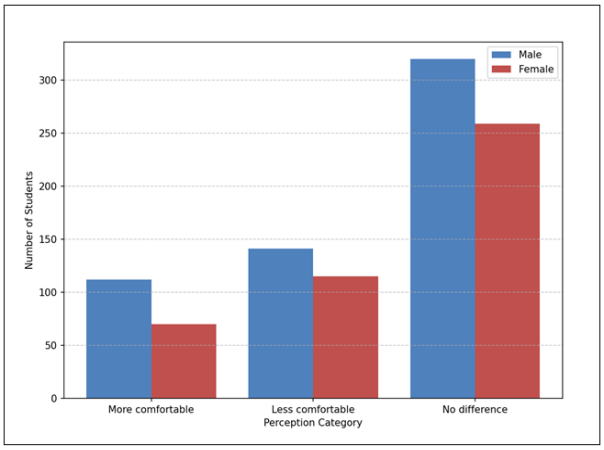

Figure 3. Perception of Smokeless Tobacco in Social Gatherings

Table 4. Willingness to Accept Smokeless Tobacco if Offered by a Friend (Gender-wise Distribution)

Response Category	Male (n = 573)	Female (n = 444)	Total (n = 1017)	Percentage of Total (%)
Definitely not	484	372	856	84.20
Probably not	34	34	68	6.70
Probably yes	23	29	52	5.10
Definitely yes	32	9	41	4.00

Note: Chi-square test for gender differences: p = 0.007 (significant). Percentages out of n = 1017.

Table 5. Overall Distribution of Responses to Peer Offers of Arecanut and Smokeless Tobacco (Combined Across Two Items)

Response Category	Combined Count (Arecanut + Smokeless)	Percentage of Combined Responses (%)
Definitely not	1699	83.50
Probably not	112	5.50
Probably yes	137	6.70
Definitely yes	86	4.20

Note: Percentages are out of the combined response total (n = 2,034) because responses from two peer-offer items were aggregated. Values rounded to one decimal place.

[8]. Furthermore, the boys-only disparity shown in willingness to engage indicates a need for gendered subgroup programme content focusing on male peers' social norms [7].

That there is no such dependence on gender/social perception also with peer offers as the independent variable indicates that this is a better predictor of behaviour than beliefs concerning the role of tobacco within society. This would be consistent with social learning theory's posit that it is observational learning processes and reinforcement (rather than systems of abstract belief) which determine the behaviour of teenagers [6].

Taken together, the findings suggest that in childhood (and not a later age when a reactive rather than preventative response is steered), the school-based prevention intervention might be best served by focusing on reducing peer influence via building refusal self-efficacy and normative beliefs positive orientation. Child centred interventions initiated early in life, before the age of 15 years, have an opportunity for reducing arecanut and ST initiation [3].

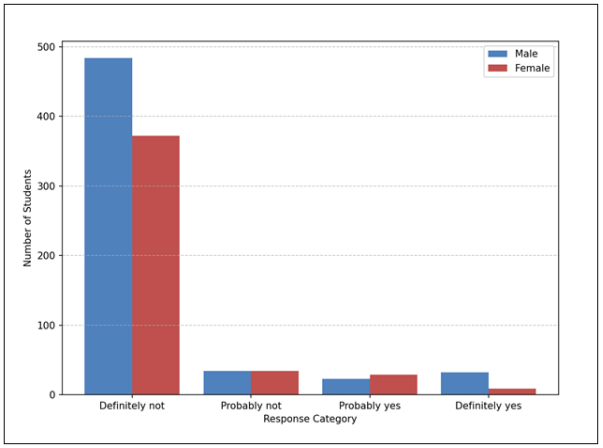

Figure 4. Willingness to Accept Smokeless Tobacco (Gender-wise)

Discussion

Interpretation of Findings

The present cross-sectional study aimed to examine the role of peer group in initiation of arecanut/tobacco_PRODUCT use among children less than 15 years. From these numbers, it is clear that even though majority of respondents believe there was "definitely no way" they would chew arecanut (82.9%) or SLT (84.2%) if friends offered them, quite a few might be wetting the powder's peer influence effect bait down. Such a vulnerability can be hazardous, as the early-adolescent experimenting could move on to trigger and maintain chronic smoking or dependence [14]. The results highlight the importance of early adolescence as an intervention age and they illustrate that being vulnerable to peer influence during this period carries long-term consequences given the uptake of behavior, engramming (patterning) which may spillover into one's lifetime [2].

Gender Differences

Gender differences in intention to use two items (arecanut and smokeless tobacco) were also observed ($p < 0.001$, $p = 0.007$), with boys being slightly more likely than girls to report that they agreed with questions for these two products. This finding is consistent with earlier evidence that in peer influenced children boys show greater risk-taking compared to girls, an effect paralleling the sociocultural gender norms [7]. While it is likely that both boys and girls try to 'act their age' and try to behave the same way as other popular kids in a group, girls are influenced by cultural side bars that act as external social control linked to prevention of uptake of cigarettes [4]. Understanding these gender dynamics is important for prevention strategies that focus on the interactive effects of risk factors.

Peer Influence Mechanisms

The friend network effects of smoking initiation are consistent with social learning theory (i.e., the tendency for

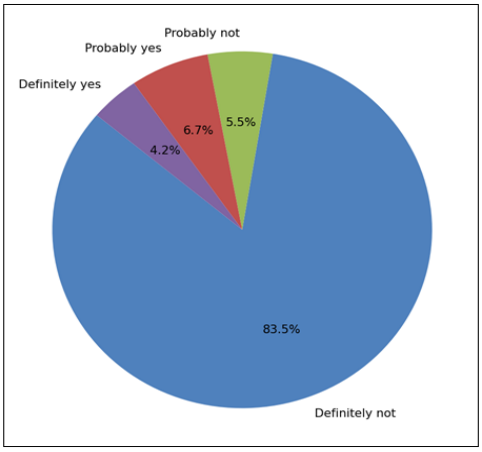

Figure 5. Overall Distribution of Responses to Peer Offers

people to mimic peers and others), which emphasises that observation, imitation and reinforcement affect behaviour across time through social environments [6]. Peer interactions are often social tests, with the opportunity to earn pride and status among your peers on the line. Instead, a decline can lead to socialiser fear of rejection or status degradation. The former trends suggest peer group norms are indeed influential on substance use behaviors, and interventions focusing on modulating group perception of normative behavior as well as strengthening refusal skills may lead to initiation reduction [5].

Comparison with Previous Studies

The present study is also in concordance with those of Indian and other international multi-centric studies on tobacco use among adolescents. These results are consistent with those of others in which peer pressure was the main predicting factor for both use of ST4 and initiation of arecanut rather than knowledge about its harmful effects [15]. We are also shown that onset of use is common in early adolescence and the process occurs in a social setting (e.g., school brakes; meeting with peers) [8]. The gender discrepancy as reported by the present study is in line with previous findings and it is indicative that sociocultural gender-specific context should be addressed in prevention [7].

Public Health Implications

Results imply a key influence of peers on use of glue-containing products and underscore the importance of school-based prevention to address this behaviour before it becomes habitual. Programme should prioritize on cessation Kick the Tobacco Habit Dismantling tobacco, adapatation from article found here Decades of tobacco control research states Start encojudgin g youth to reject the start in youth; Peer influence as an intervention; (who are also learning to modify risk behaviors) (India FCTC, report series 6 page XIX) SINHA ET AL. It should also be understood that no approaches can succeed if school based dental care and the role positive role parents / communities contributed in creating a inhospitable environment for initiation. Such gender-specific care, that attends to differences in risk between the sexes would no doubt be more effective.

In conclusion, this cross-sectional study was conducted to determine the effect of peer pressure on early arecanut and SLT initiation among school children (10-15 years). The results yield important information regarding trajectories, gender-sensitivity and social processes of early onset substance use with substantial intervention implications at the level of public health.

The results suggest that peer pressure plays a strong role in initiating chewable arecanut and SLT habits in children. Nearly all respondents reported they would "definitely not" consume, even if their best friend offered them for free, arecanut (82.9%) and smokeless tobacco (84.2%). This is fantastic, as it means that the majority of young people either know risks when they see them or are already less susceptible to peer influences. However, the study also found a significant minority of those exposed who are still vulnerable to peer offers; with 12.8% (for areca nut) and 9.1% (for smokeless tobacco), respectively, indicating some level of susceptibility to an offer to use – but lower levels of susceptibility if offered by peers. This early vulnerability is important, as experimentation in adolescence can commonly result in stable habits and;-life-contracting reliance [14].

Gender was a powerful and significant moderator of susceptibility to peer influence. Boys were also more apt than girls to respond they might accept A or ST type GC (boys $p < 0.001$; GLM: boys $p=0.006$) (Table 4). However, these findings are in line with other studies that provide evidence to cultural and gendered norms as potentially leading males into more risky behaviours [7]. For boys, experimenting might function as an ego-burnisher as much as a mark of obedience or maturity so there's room for gender-tailored prevention that targets these psychosocial aspects.

The only item for which there were not gender differences in belief of SLT use at the social level as to whether or not "it mattered" was about half of students checked "no difference" (56.9%). Thus, it would appear that attitudes by themselves are relatively weak antecedents of behaviour and peer offers and there may be more powerful predictors of the step through trying. This is in keeping with (though not directly explained by) the social learning approach where behaviors are not attitudes but learned through observation and imitation [6].

These results highlight the necessity for early school based prevention programs. Programs could have oriented children not only toward the harmful effects of arecanut and smokeless tobacco, but also towards counteracting peer norms, establishing refusal skills, and facilitating social resistance to pressure from friends. There are many who believe peer-mediated education can be especially powerful in this role because of the constancy of peers themselves as models and challenges to seductive qualities of sanctioned, substance-using friends [3]. Parental, teacher and community leader participation can add to levels of social support for anti-tobacco messages and help in establishing an environment with protections against experimenting.

In conclusion, while the majority of schoolchildren

in our study rejected arecanut and smokeless tobacco products offered by their peers, a high-risk subset of the population exhibits early abandonment which is still worrying. The influence of peers is known to be a strong predictor of behaviour, and there seems very little doubt that interventions which offset peer pressure are very likely indeed to reduce tobacco harm, especially in the early years of adolescence. Lawmakers, schools can help reduce early teen tobacco use through gender-specific, peer-influenced prevention: Comprehensive prevention strategies that address the unique needs of each gender and draw from the activities of peers likewise prevent tobacco disease in the long term.

Acknowledgments

Statement of Transparency and Principals:

- Author declares no conflict of interest
- Study was approved by Research Ethic Committee of author affiliated Institute.
- Study's data is available upon a reasonable request.
- All authors have contributed to implementation of this research.

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