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Deconstructing Pān: Betel Quid's Journey from a Medically Beneficial Snack to a Cancerous Drug

Daria Peshcherova

***WATER FOOD DIABETES AYURVEDA GENETICS POVERTY YOGA STDS HISTORY SEX
SOCIETY FAMILY PLANNING CASTE GENDER RIOTS RELIGION HEALTH DEMOCRACY
FLOODING WASTE-MANAGEMENT UNANI PSYCHOLOGY FOLK MEDICINE
AFFIRMATIVE ACTION GLOBALISATION BIOCHEMISTRY OLD AGE REPRODUCTIVE
HEALTH MALARIA POLICY HIV AIDS WHO MEDICOSCapes COLONIALISM PHARMACY
RELIGION LEPROSY BOTOX DEHYDRATION NGOs AYUSH...***

Master's Thesis

**DECONSTRUCTING *PĀN*:
BETEL QUID'S JOURNEY FROM A MEDICALLY
BENEFICIAL SNACK TO A CANCEROUS DRUG**

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1st Supervisor: Heribert Beckmann

2nd Supervisor: Prof. Dr. Hans Harder

Submitted by: Daria Peshcherova

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Abstract

Background: Betel quid (*pān*¹) chewing has prevailed in South Asian and South East Asian countries since ancient times as a sociocultural tradition for promoting health, strengthening relationships and personal beautification. Today over 600 million people worldwide are estimated to chew betel quid on a daily basis and it is recognized as a public health concern. Biomedical research links the growing cases of head and neck cancers in the subcontinent with the consumption of the highly addictive betel quid ingredients, areca nut and tobacco.

Objectives: An anthropological approach towards betel quid chewing practices suggests the biomedical perspective ignores the heterogeneity of the quid and the context wherein the consumers' subjective and objective experiences are driven by personal, social and cultural motivations. This thesis explores the contemporary habits of betel quid consumers to find out what social and cultural factors influence initiation, continuation or discontinuation of *pān* chewing; what risk/benefit factors are associated with it; and how public health hazard warnings affect the behavior of consumers and traders.

Methods: This ethnographic study is based on participant observation and 16 semi-structured, qualitative interviews conducted with *pān* consumers in Karachi and Lahore in Pakistan during four weeks of fieldwork between February 18 and March 17, 2020. Individual consent was obtained for the anonymous use of recorded data for research purposes. The interviews were transcribed and translated verbatim into English from Urdu with the help of a bilingual native speaker. Thematic content analysis was used to form codes and categories using the deductive approach via MS Excel (v2010).

Results and Conclusions: The motivations for initiation of *pān* chewing were entrenched in family tradition, sociocultural acceptability and peer influence. Contemporary consumers of betel quid perceived their chewing habit as harmful and addictive likely because of the growing awareness and publicity of biomedical research on *pān*'s carcinogenic effects. This perspective was consolidated by the industrialization of the production process of several ingredients of betel quid, leading to people's distrust in the quality of the quid sold in market because of their alienation from the processing of raw materials.

¹ In this thesis I have used transliterations of Hindi/Urdu words according to the International Alphabet of Sanskrit Transliteration (IAST).

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Introduction

A spicy aroma fills the air, adding a distinct flavor to the smoke from the traffic jam we are stuck in. Along the pavement between the main road and the service road, people from all age groups throng the numerous restaurants and cafes. Unfettered by the hustle and bustle of the streets, some families chomp away on food. Groups of men lounge leisurely on the huge wooden beds decorated with comfy colorful pillows (reminiscent of Mughal dining halls). A small distance away from the designated ‘family areas’, a large number of carefree youngsters linger around small cabins, busy chatting loudly with frequent puffs of cigarette stubbed between their fingers. The narrow streets on both sides of the main road are filled to the brim with cars and customers waiting for food or already eating. I roll up the windows to cancel out the heat, smoke, noise and the humidity for noting down the details while I scout the area further. The air-conditioning helps to focus clearly in a warm but unexpectedly humid February evening. The driver maneuvers around the fleet of cars and swarms of people to find a suitable parking spot for me to disembark and observe them from close by.

The location is a popular food street on Shahrah-e-Jahangir (named after the fourth Mughal king of India) in North Nazimabad, Karachi, where hundreds of families come out every evening to eat out. My host has informed me that the neighborhood is perfect to witness the dynamics of the betel quid (locally called *pān* in Urdu language) trade because it is a popular after-dinner snack. Apparently betel quid sales should flourish around restaurants and cafes and after 9pm is the peak time for observing these activities. On almost every street corner, vendors are busy in slathering lime and catechu² on betel leaves as they anticipate the nearby diners to indulge in the usual post-dinner necessity. As families prepare to leave and start sitting in their cars, the patriarchs sneak away. Once at the betel cabin, they buy different varieties of quid. They eat the quid on the spot themselves but get the others packed separately for their loved ones. The packaging is marked by the seller so that each quid goes to the intended individual, suggesting that every person has a personal choice of ingredients. Some other customers on motorbikes stop by to buy several readymade betel quids in a hurry. An endless chain of betel consumers moves along in a chaotic manner in front of the *pān* stalls as everyone tries to break forward and place an order. The vendor’s hands move in a mechanical way to prepare each quid with an occasional glance at the customer to confirm the ingredients. This hectic betel quid sale and purchase continues till late night, until all customers have satisfied their needs for the day. Around midnight, most of the betel vendors (*pānwāla*) have sold out their stocks and start cleaning up their messy cabins. It is time to go home.

² Catechu is an extract of acacia trees used variously as a food additive, astringent, tannin, and dye. It is extracted from several species of Acacia by boiling the wood in water and evaporating the resulting brew.

What is *pān*?

Betel quid (called *pān*, *tāmbūla* or *bīra* in the local languages of the subcontinent) is a delicate snack prepared by folding a betel leaf with crushed or chopped areca nut (more often known as betel nut), slaked lime and other selective additives. The three most common quid ingredients are the betel leaf, slaked lime and the areca nut. The heart-shaped betel leaf comes from the Piper Betel Vine, which grows in the semi-tropical regions of South Asia and Southeast Asia (Rai et al., 2011). Areca nut is a



Betel leaf on sale at Anarkali Bazaar in Lahore. The *pān* is sold by the kilos at wholesale markets in Pakistan.

small ball-shaped fruit of the Areca Catechu tree which grows in the tropical zones of Malaysia, Taiwan, Thailand, India and the South Pacific (Raghavan and Baruah, 1958). The fruit can be chewed alone (sliced, ground or whole) or mixed with various ingredients to prepare a betel quid (Nelson and Heischober, 1999). Slaked lime (calcium hydroxide), another essential element of betel quid, is usually obtained from limestone, seashells or corals that are burned and crushed (Cielas, 2016; Lee et al., 2014). The lime is either left in powdered form or dissolved in water or wine to produce a thick white paste that is applied to betel leaves when preparing the quid (Anderson, 2007). The quid is then placed in the mouth by the consumer between the gums and cheek for about 15 to 20 minutes until the ingredients get dissolved to form a bright red juice. This mixture of saliva and the quid ingredients is normally spat out and is the primary cause of reddish splatters on the roads and pavements observed across South Asian countries (Bhat et al., 2010; Nelson and Heischober, 1999).

In Pakistan, the simplest of betel quids is called *sāda pān* (plain/simple betel quid) containing only betel leaf, areca nut (*chaliyā*), catechu (*katthā*) and slaked lime (*cūnā*). However, there are hundreds of other varieties of betel quid available. Two of the most popular quids are: tobacco betel quid (*tambākū pān*), which comprises of chewing tobacco in addition to the ingredients in *sāda pān*; and the very elaborate sweet quid (*mīṭhā pān*), which contains betel leaf, catechu and lime along with several other sweet ingredients, including crushed coconut (*khoprā*), rose jam (*gulkand*) and glazed cherry. Depending on the type of *pān* and individual preferences, other savory ingredients or aromatic spices including cardamom (*ilācī*), cloves (*lauṅg*) and fennel seed (*sauṅf*) may be added to the quid (Gupta and Ray, 2004). Studies have reported up to 38 and 35 ways of using betel nut, tobacco or both in the form of quid in India and Pakistan, respectively (Maher, 1997; Pindborg et al., 1967). In many districts of India, Nepal and Pakistan the majority of betel users consume *pān* containing tobacco (Lee et al., 2014; Maher, 1997; Mehta et al., 1969), while in Sri Lanka more than half of

chewers use betel quid without tobacco and lime (Lee et al., 2014). In Karachi, Pakistan up to 15% of the population was found to be habitual chewer of betel quid (Mahmood, Jafarey and Aijaz, 1974). Up to 40 percent of the population in India, Pakistan and Nepal, is reported to have consumed betel quid in the past 20-30 years (Lee et al., 2014; Maher, 1997; Mehta et al., 1969; Sharan et al., 2012). Apart from the use of *pān*, the consumption of commercially manufactured tobacco-based products (such as *pān masālā* or *pān parāg*³, *mainpurī*⁴ and *guṭkā*⁵) has also become widespread in Pakistan, India, Sri Lanka, Bangladesh and Nepal (Gupta and Ray, 2004).

Going global

Betel quid chewing was never restricted to a single country or region, the product has become a global health concern in recent decades. The growing availability of such products in South Africa, Australia, US, UK and Germany has been linked with the transnational migration of Asian populations (Banerjee et al., 2014; Bedi, 1996; Maćkowiak, 2016; Núñez-de la Mora et al., 2007; Reichart and Philipsen, 2006; Warnakulasuriya, 2002; World Health Organization, 2003). In the UK and US, betel quid chewing is widely popular among first- and second-generation South Asian



There are hundreds of varieties of *pān* and every individual has a personal preference for specific ingredients as well as their quantities.

immigrants, especially Bangladeshis, with social acceptability and perceived health benefits playing a major role in transmission through succeeding generations (Banerjee et al., 2014; Núñez-de la Mora et al., 2007; Williams, 1995). Globally more than 600 million people, almost 10% of the world's population, are estimated to chew betel quid on a daily basis (Heck et al., 2012). The World Health Organization (WHO) recognizes the consumption of betel quid as a public health concern based on recommendations of the International Agency for Research on Cancer (IARC) on the adverse health effects and psychoactive properties of several quid ingredients, particularly areca nut and tobacco (Núñez-de la Mora et al., 2007; World Health Organization, 2003). Areca nut is regarded as the fourth

³ *Pān masālā* or *pān parāg* is an industrially manufactured mixture of chopped areca nut, lime, fennel seeds, sugar coated seeds, cardamom and other ingredients (sometimes including tobacco).

⁴ *Mainpurī* is an industrially manufactured tobacco based product without betel leaf.

⁵ *Guṭkā* is a chewing tobacco preparation made of crushed areca nut, tobacco, catechu, paraffin wax, slaked lime and sweet or savory flavorings packed in thin foiled packets or tins.

most commonly used psychoactive substance in the world after nicotine, alcohol and caffeine (Gupta and Ray, 2004). Studies have reported that areca nut contains several psychoactive alkaloids such as arecoline, which stimulates the central nervous system, and other compounds that are carcinogenic (Guha et al., 2014; Gupta and Ray, 2004; Winstock, 2002).

From the other side

While public health authorities criticize betel quid chewing habits over health concerns, an anthropological perspective of similar practices suggests that this narrative is overly simplified. Firstly, there are hundreds of different types of betel quids with different ingredients and tobacco quid is just one of them. There may be areca nut in most of the betel quid types but the highly variable amounts of the chopped nut in each quid and individual preferences for having more or less areca nut or not at all should be counted as variable factors before labelling a specific product or ingredient dangerous. All types of betel quid cannot and should not be linked with having harmful effects on health. Secondly, the transition of the discourse on betel quid chewing from a socially acceptable, medically beneficial and aesthetically attractive practice into a medical problem with harmful consequences on the human body is apparently driven by the growing dominance of the public health narrative over traditional knowledge. Like many other sociocultural phenomena in recent decades, betel quid chewing has attracted attention as a drug addiction associated with the rising number of oral cancers. However, *pān* chewing, like consumption of any other food or drug, is a combination of subjective and objective experiences influenced by personal, social and cultural motivations. This phenomenon cannot be simply reduced to an individual choice similar to the biomedical narrative about the use of tobacco, alcohol or marijuana, which has medicalized centuries-old practices.

Anthropologists have criticized this narrow perspective of public health for taking the human body out of the cultural context to characterize them as passive victims of epidemics and addictions (Bell, Salmon and McNaughton, 2011; Macnaughton, Carro-Ripaldab and Russell, 2012; Rooke, 2013). For this study, the concept of medicalization proposed by Conrad (2007) serves as a suitable framework to understand the changing discourse of betel chewing from an everyday sociocultural routine into a personal pathological problem.

Aims and objectives

This thesis aims to give an ethnographic account of the habits, perceptions and experiences of betel quid chewing in the life of Pakistani individuals to find out what social and cultural factors influence initiation or continuation of *pān* chewing among participants, what risk/benefit factors are associated with betel quid chewing by consumers and how public health hazard warnings affect the behavior of consumers and traders. Given the popularity of betel quid chewing and a growing opposition to chewing habits, qualitative research on contemporary consumption habits in countries

of its origin, such as Pakistan, can be useful for gaining a deeper understanding of the motivations of betel chewing, its cultural and social significance and aesthetical and medical perceptions.

The study is based on participant observation and semi-structured interviews conducted during four weeks of fieldwork in Karachi and Lahore, whereby I explore the consumption patterns for different varieties of betel quid in order to understand what *pān* consumers consider hazardous or harmless. I have solely focused on freshly made betel quid prepared by people at home or by street vendors at *pān* shops and stalls. I have not included information on other *pān*- or tobacco-derived products that are commercially produced in massive quantities and have largely replaced *pān* in recent years. Considering a lack of anthropological studies on betel quid consumption, this study makes an important contribution to the anthropology of drugs and public health research in South Asia on a previously unexplored topic.

Thesis structure

The thesis is divided into seven chapters with this introduction serving as the first one. In the second chapter, I have provided the historical background of betel nut and quid chewing in the subcontinent and described how the practice became a characteristic cultural tradition in the Indian context. The third chapter consists of the state-of-the-art for research on theories of drug initiation, addiction, social acceptability and medicalization of products similar to betel quid that I have used as the theoretical framework for arguing the case of betel quid chewing. In the fourth chapter, a descriptive methodology for this research is provided with details about site selection, modes of data collection, brief participant profiles, data analysis and limitations used for interpreting the qualitative interviews. In the fifth chapter, I have used the theory of experimental trajectories by Raikhel and Garriott (2013) to explain how my participants were introduced to the habit of betel quid chewing and what factors allowed them to continue its use. Using my observations and interview transcripts, I have described the influential factors that result in people starting a specific culturally endemic practice and continuing it because of the social acceptability of the practice within the culture.

The sixth chapter forms the crux of this thesis, whereby I have described the perceptions of medicalization of betel quid chewing among my participants. Evidence of public health research on *pān* as a hazardous psychoactive drug has compelled several Asian countries to introduce prohibitions against betel quid and associated products. Health professionals, especially oncologists and dentists, have led vociferous calls for restricting access to betel products and educating masses about the hazardous effects of prolonged betel chewing. However, the use of betel quid and its products continues to rise not only in the region but globally as well. I have explored how people perceive this habit of *pān* chewing and its effects on their health. In a broader context, this helps to understand the motivations of betel quid chewers despite knowing/or not knowing the risk factors.

From heavens for humans...with love

The use of areca nut and betel leaf as an after-food mouth freshener as well as a stimulant can be traced back to ancient times within the geographical regions of South Asia and South-East Asia (Maćkowiak, 2016; Rooney, 1993). The earliest remnants of areca palm discovered in the Spirit Cave in North Western Thailand date back to 10,000 BCE (Gorman, 1970). Whether it was used as a stimulant or as food has been contested but researchers believe that humans may have used psychotropic and mood-altering substances initially as food rather than for their psychoactive properties (Saniotis, 2010). People on Micronesian islands still chew betel nut to prevent physical fatigue (Ibid). Betel nut and leaves became essential components of social gatherings and religious practices and were revered for their medicinal and beautifying values (Cielas, 2016). In Indonesia, areca nut and betel leaves have been used in burial rituals, healing practices and at wedding ceremonies since ancient times (Reid, 1985). Before modern lipsticks were introduced to Myanmar, betel quid was chewed by young women for reddening their lips because red lips were “a desirable mark of beauty” (Rooney, 1993: 15). In South Asia, betel quid chewing attained a further significant status and came to be associated with royalty, nobleness, love, beauty and the arts (Cielas, 2016). Betel nut and leaves are essential components of social gatherings and religious practices in the subcontinent, especially for their medicinal and beautifying effects (Ibid).

In the beginning

Several ancient texts have documented areca nut chewing habits in South Asia. The *Chronicles Dipavaṃsa* (‘Island Chronicle’, after third century CE) and *Mahāvaṃsa* (‘Great Chronicle’, ca. fifth century CE) are the first literary records of areca nut and betel leaf use in India (Zumbroich, 2008). Referring to the first Buddhist missionaries sent to the island, a passage from *Dipavaṃsa* describes the consecration of Ashoka of Pāṭaliputra in 270 BCE as: “At that time the gods always brought the celestial tooth-sticks and the betel leaves, fragrant, grown on the mountain, soft, glossy, sweet, full of juice and pleasing ... [and] the celestial sugar-cane, a quantity of areca nut and a yellow cloth” (*Dipavaṃsa* 6.4, 6.10., cited in Zumbroich, 2008: 117).

In Tamil Nadu, ancient folklore describes the heavenly ascension of betel leaf to Earth, wherein a divine woman Urvashi⁶, who had a habit of chewing betel leaf, fell in love with Arjuna⁷ during his stay in *Devaloka*⁸ and followed him back to Earth (Rajanarayanan, 2008). Since betel leaf was consumed only by gods and unavailable on Earth, Urvashi brought the vine with her by hiding the plant “somewhere where it could never ever be checked” (ibid: 218). However, Urvashi failed to

⁶ Urvashi is the celestial dancer of Indra's palace in *Mahābhārata* and other ancient Hindu texts.

⁷ Arjuna is the main protagonist of the Indian epic *Mahābhārata* and also appears in other ancient Hindu texts.

⁸ *Devaloka* is a place in Hindu mythology where gods live.

attract Arjuna and one day got really mad at him and cursed Arjuna to become a eunuch. She threw out the betel vine from her insides and went back to Indra's kingdom⁹. This tale of betel vine coming to Earth became associated with "passion among man and woman" (ibid: 218).

Indianization of betel

Neither areca palm tree nor betel vine was endemic to the South Asian region. The plants were introduced to South India in the middle of the second millennium BCE from the islands of South-East Asia (Zumbroich, 2008; Zumbroich, 2012). In northern India, areca nut chewing is first recorded about 500 BCE (Zumbroich, 2008). In Indian languages, areca nut mixed with betel leaf and lime was called "*supārī*" or "*tāmbūla*" (Raghavan and Baruah, 1958). The *tāmbūla* motif is popular in Indian literature and arts (Cielas, 2016). Areca nut and betel leaves were not only an element of hospitality and 'sexual etiquette' but were also used for religious purposes to worship gods and make an offering to deities while chanting mantras (ibid). This quid thus played a connecting role in forging relationships between hosts and guests, man and woman, king and his subjects and gods and their devotees (ibid).

Ancient texts

Ancient Ayurvedic literature contains many descriptions about the use of areca nut and betel leaf. The *Carakasamhitā* (ca. first century CE) mentions a betel quid mixed with several aromatics, which was used as a part of the daily routine for wellbeing and oral hygiene: "One desiring clarity, taste and good smell should keep in his mouth the fruits of nutmeg, musk seed, areca nut, cubeb, small-cardamom and clove, fresh betel leaf and exudate of camphor" (*Carakasamhitā*, *Sūtrasthāna* 5.76cd-77, cited in Zumbroich, 2008: 118). Another Ayurvedic text *Suśrutasamhitā* (ca. third or fourth century CE) recommends the "intelligent eater" either to eat some fruit of an astringent, pungent or bitter taste or to chew a betel leaf prepared with crushed areca nut, camphor, nutmeg, or clove (Raghavan and Baruah, 1958: 316). The book also describes in detail the properties, actions and health benefits of areca nut and betel leaf: "Chewing betel leaves with powder of camphor, nutmeg, cubebs, clove, musk seed, lime and areca nut [...] mitigates excess salivation, is good for the heart, and cures diseases of the throat; it is beneficial soon after getting up from sleep, partaking meals, bathing and vomiting" (*Suśrutasamhitā*, *Cikitsāsthāna* 24.21-23, cited in Zumbroich, 2008: 119).

Medieval literature

Medieval Indian literature continued to praise betel quid for its numerous health benefits. A

⁹ Indra is the king of the gods in *Svarga* (Heaven) with the capital city Amaravati in ancient Hindu texts.

Sanskrit book titled *Hitopadeśa*, composed by Narayana between 800 to 950 CE (Roy, 2010), describes areca nut as pungent, bitter, spicy, sweet, useful for removing phlegm, expelling wind, killing germs, subduing bad odor, beautifying the mouth, removing impurities and an aphrodisiac (Raghavan and Baruah, 1958: 316). *Jyotir nibandha*, a treatise in Sanskrit composed around 1524 CE, recommends a combination for the “best *tāmbūla*” with three parts areca nut, two parts betel leaf and one-part lime and catechu. It discusses the properties of betel quid to produce pungency, bitterness, saltiness, sweetness and heat, remove *vāta* and phlegm, excite passion, beautify and purify the mouth and remove unpleasant smell from the mouth (Strickland, 2002: 91).

Foreign travelers to medieval India also recorded the use of betel quid and its importance in health behavior and cultural life (Penzer, 1927; Raghavan and Baruah, 1958). Arab physician Abd Allah ibn Ahmad wrote about betel chewing in India in his treatise on drugs in 1225 CE, quoting Arab author Sharif as “...betel brightens the mind and drives away the cares ... whoever uses it becomes joyful; he has a perfumed breath and perfect sleep ... betel-nut replaces wine among Indians by whom it is widely used” (Raghavan and Baruah, 1958: 316).

Famous Moroccan explorer Ibn Batuta, who visited the Delhi Sultanate (1206-1526) in the fourteenth century, wrote: “...Indians have a high opinion of betel, and if a man visits a friend and latter gives him five leaves of it, you would think he had given him the world, especially if he is prince or notable. A gift of betel is far greater honor than a gift of gold and silver.” (Batuta, 1929, cited in Natnoo, 2018: 39). In his book “A Dictionary of Economic Products of India”, Scottish physician and botanist George Watt (1851-1930) wrote that betel leaf acts as a gentle stimulant and exhilarant. Its consumers are overcome with a feeling of stillness when deprived of it (Watt, 1892, cited in Natnoo, 2018: 39). British historiographer William Foster (1863-1951) in his commentary on India also wrote about the medicinal importance of betel quid that betel chewing helps to cool down the head, strengthens the teeth and makes one unused to it light-headed (Foster, 1926, cited in Natnoo, 2018: 39).

Diversification of *pān*

In ancient and medieval India, the method of preparing *pān*, number of ingredients and manner of chewing betel quid varied as much from region to region as they vary today. As new ingredients started being introduced in betel quid depending on personal tastes and preferences of a chewer, the types of *pān* multiplied over time and even the classical recipe of betel quid containing betel leaf, areca nut and lime underwent drastic changes. Before the seventeenth century, tobacco quid was unknown in the subcontinent. According to Moreland (1962, cited in Gokhale, 1974: 484), tobacco plant was first brought to the Gujarat province by the Portuguese and quickly gained popularity throughout the subcontinent. During Akbar's reign (1556-1605), tobacco leaves and pipes were

presented to the Mughal court as “untried medicine” (Elliott and Dowson, 1964, cited in Gokhale, 1974: 487). Within decades, tobacco became a major cash crop in India and was widely used by all strata through smoking and chewing in a *pān* (Gokhale, 1974). One of the first references to the use of betel quid with tobacco can be found in the travelogue of English merchant Thomas Bowrey, who described how tobacco was served with *pān* leaf and areca nut at Hindu weddings on the Coromandel coast in south-east India (Temple, 1967, cited in Gokhale, 1974).

During the Mughal period, the betel quid attained high status with its introduction to the royal court culture. The quid started being served at feasts in *pān* dishes and all visitors at the royal court were offered the snack and presented with its gifts (Natnoo, 2018). According to Manucci (1907, cited in Natnoo, 2018), royal women often received special cash grants to buy betel, perfumes or shoes, which showed that betel was relished by the Mughals as much as coffee by the Ottomans (Natnoo, 2018). Emperor Akbar’s biographer Abul Fazl wrote extensively on betel leaf varieties extant in Mughal India, its commercial importance as well as health benefits. “The eating of leaf renders the breath agreeable, and repasts odorous. It strengthens the gums, and makes the hungry satisfied, and the satisfied hungry,” he wrote in *Ain-e-Akbari* (Abul Fazl, 1989, cited in Natnoo, 2018: 40).

***Pān* in Pakistan**

As discussed above, *pān* came to be associated with royalty and status in India. The royal patronage of *pān* chewing permeated the *Nawāb*¹⁰ (noble) families ruling the many princely states in British India. When Pakistan was created in 1947 as a separate country out of the Muslim-majority regions, up to 2 million Indian Muslims crossed the border to settle into the new country. Apart from their physical belongings, these families brought their culture and values with them. Since *pān* chewing was endemic to their ancestral regions in India, the delicacy found its way into Pakistan with these migrant families, who locally came to be called *Muhājirs* (Ahmed et al., 2015; Baig et al., 2015). Although betel quid was introduced to Pakistan fairly recently, many ethnic groups in the country now chew *pān* habitually. A study on smoking and chewing habits of residents of Karachi found that men consume eight *pāns* a day whereas women chew nine *pāns* daily (Mahmood, 1982).

However, Pakistan also has one of the highest prevalence of oral cancer cases in the world (Khan, 2016). About 40 percent of cancer patients suffer from oral cancer, which is the most common cancer among Pakistani men and the second most common among Pakistani women (Ferlay et al., 2015; Tribune, 2014). In 2018 alone, 18,881 patients were reported with oral cancer across the country (Associated Press, 2020). One of the major contributing factors is believed to be the use of

¹⁰ *Nawāb* is a royal title indicating a sovereign ruler, often of a South Asian state.

chewing tobacco in the form of *pān* and other related products like *supārī*¹¹ and *guṭkā* (Khan, 2016; Tribune, 2014). In the subcontinent, the meta-relative risk for oral cancer has been found to be 7.74 for betel quid with tobacco and 2.56 for betel quid without tobacco (Guha et al., 2014).

Public awareness

This correlation between tobacco chewing and rising oral cancer cases has prompted the health authorities to intervene. The advertisement of tobacco products was banned in Pakistan in 2002 and even display of tobacco products was prohibited in 2020 (FCTC, 2020). Health care professionals and social activists have called for shutting down industrial production of betel nut and tobacco-related products such as *pān*, *guṭkā*, *naswār*¹², etc., as well as banning their sale and import (Associated Press, 2020). Since most oral cancer cases arrive initially at dental hospitals, they have become a major centers of public awareness campaigns and education. Conferences and workshops are regularly organized to educate people about *pān* and related products. Media coverage of such events helps to spread the message that shapes public opinion, similar to campaigns against the use of alcohol, tobacco and other drugs around the globe (Wakefield, Loken and Hornik, 2010).

As shown above, medical research on betel quid use mainly focuses on its negative health outcomes particularly the development of oral cancer (Núñez-de la Mora, 2007). Similar to the use of tobacco, the use of betel quid also appears to have been redefined from a socially acceptable, beneficial and aesthetic practice to a medical problem and an addictive habit. Public awareness campaigns driven by this medical discourse on dangers of areca nut and tobacco chewing has downgraded its perception as a habit of people from lower-income groups (Cielas, 2016) while ignoring the enormous heterogeneity of its varieties and methods of chewing. Similar to smoking, drinking and obesity, this changing discourse about *pān* chewing can be related to the medicalization of an everyday sociocultural phenomenon into a personal pathological problem (Conrad, 2007).

¹¹ *Supārī* is a sugar-coated areca nut.

¹² *Naswār* is a moist, powdered tobacco snuff stuffed in the floor of the mouth under the lower lip or inside the cheek for some time.

Medicalization, modernization and social acceptability

In anthropology of drugs, betel quid is classified as a “traditional” drug along with tobacco, qat¹³, kava¹⁴, etc. (Marshall, Ames and Bennett, 2001). Quid chewing is a socially acceptable habit in many South Asian and South East Asian countries, practiced among all age groups and sexes (Mahmood, 1982; Nelson and Heischouer, 1999; Shah et al., 2002), and deeply rooted in folklore, local arts and crafts, religious rituals, social customs and cultural practices (Gupta and Warnakulasuriya, 2002). Children get introduced to betel quid at an early age under the influence of family, friends or acquaintances (Nelson and Heischouer, 1999).

How it starts?

Situating the first experience of a drug can offer a broader picture of the circumstances under which initiation takes place and indicate social and psychological factors that influence an individual. The initiation of substance use by an individual is a complex mix of narratives describing subjective experience along spatial, temporal and epistemic dimensions. Peer pressure, adulting, copying parents and general sociocultural attitudes are known to lead to repeated use of the substance despite initial adverse physical effects that tend to disappear as “tolerance” develops (Schuckit, 1980). Additionally, the availability of drug, rebellious nature of the individual and psychiatric distress such as anxiety or depression are possible contributors to drug initiation (Goodwin, 1980). The initiation of drug use, particularly during adolescence, has been linked with self-perceived behavioral pressure of the individual’s immediate support system, which “plays a role in moving the individual to drug use through peer values, models, and reinforcers” (Huba, Wingard and Bentier, 1980: 320). Studies on marijuana use have shown that initiation mostly happens in the company of close friends, from whom the individual learns not only about the smoking techniques but also about intoxication as a pleasurable and valuable experience (Becker, 1980).

Cultural influence

Given that cultural influence plays a significant role in the initiation of addictive substances (Bejerot, 1980; Frederick, 1980), certain intoxicants are socially accepted or ‘culturally endemic’ such as alcohol in Christian circles, cannabis in some Muslim communities and cocoa in some South American Indian tribes. Gorsuch (1980) suggests three social interactive models for the initiation of drug use: the non-socialized drug user model, the pro-drug socialization model and the iatrogenic model.

¹³ Qat (or khat) are the leaves of an Arabian shrub, which are chewed (or drunk as an infusion) as a stimulant.

¹⁴ Kava is a beverage or extract that is made from *Piper methysticum*, a plant native to the western Pacific islands.

- The non-socialized drug user model describes a person who is open to drug use because of a lack of social exposure against drugs.
- The pro-drug socialization model suggests that individuals start the use of an intoxicant for religious or ritualistic purposes in a society where this drug plays an important part in local culture.
- The iatrogenic model refers to a setting where people are introduced to a drug for medical reasons and continue the use of this substance for the sake of its beneficial effects, even though initial medical need might not be relevant anymore e.g., the case of opium and morphine (ibid: 20-23).

The latter two models are particularly relevant for my research on betel quid chewing, which is ‘culturally endemic’ in many South Asian and South East Asian communities. This cultural acceptance has allowed the geographical extension of betel quid chewing to Africa, Australia, UK and other countries with migration of Asian populations (Maćkowiak, 2016; Warnakulasuriya, 2002; World Health Organization, 2003). Among South Asian immigrants in the US and the UK, social acceptability, perceived benefits and transmission through generations are the major reasons for initiating *pān* eating (Banerjee et al., 2014; Núñez-de la Mora et al., 2007). Consumers usually start during their teenage years but some are introduced to the practice as early as five years old (Bedi, 1996). Pressure from family and friends was the most common reason for initialing betel chewing among immigrant Bengali women in the UK (Núñez-de la Mora et al., 2007). Since elder family members did not consider the habit to be risky for health, young women were encouraged to adopt a practice as a sign of “entering into womanhood” (Bedi, 1996: 76). Similar associations of betel quid with maturity are present in the east Indonesian culture, where young people symbolically enter the stage of adulthood by chewing betel after a teeth-filing ritual (Reid, 1985).

Medicalization of *pān*

Medicalization is described as a process by which nonmedical problems become “defined in medical terms, described using medical language, understood through the adoption of a medical framework, or “treated” with a medical intervention” (Conrad, 2007: 5). It occurs with a shift in the public discourse about a phenomenon towards a medical approach (e.g. illness or disease) defined in medical terminologies (e.g. symptoms, sickness or treatment) (Anderson, Swan and Lane, 2010). Medicalization has accelerated in recent decades because of the globalization of biomedicine and more and more problems are now scrutinized under the medical lens (Conrad, 2007: 4). There are several characteristics of medicalization and the core issue is how the problem is defined because this determines the type of solution it requires (Conrad and Bergey, 2015). Although there are many examples of “beneficial medicalization” like epilepsy and childbirth (ibid), sociologists and

anthropologists have criticized this transformation of everyday aspects into pathological conditions and focusing on the individual rather than the social environment, which leads to the problem (Conrad, 2007: 7-8).

In traditional Indian medicine, *pān* is praised for its countless medical benefits such as improving concentration, digestion, promoting productivity, keeping active and awake, overcoming tiredness, reducing anxiety and stress, preventing diarrhea and vomiting, relieving toothache, strengthening the gums and freshening the breath (Bhat et al., 2010; Moe et al., 2017; Núñez-de la Mora, 2007). However, the modern discourse on betel quid has sidetracked into a public health debate with the focus shifting on to its hazardous health aspects as a growing body of medical research points out the dangers of *pān* chewing such as oral cancer (Amarasinghe, et al., 2010; Bhat et al., 2010; Guha et al., 2014; Hirayama, 1966; World Health Organization, 2003), cardiac diseases (Deng et al., 2001), metabolic syndromes, diabetes (Hsieh et al., 2011; Yen et al., 2006), cirrhosis (Tsai et al., 2003), obesity (Lin et al., 2009) and adverse pregnancy outcomes (Yang et al., 1999). Areca nut and tobacco are deemed the most problematic ingredients with concerns about betel quid's ability to cause dependency syndrome (Winstock et al., 2000; Anderson, 2007). However, research is limited on the effects of specific betel quid ingredients and their causal mechanisms of betel quid dependence (Bhat et al., 2010).

‘Culture-bound’ drug addiction

To understand the changing public discourse on *pān* chewing, a broader look into the medicalization of other similar sociocultural habits such as alcoholism, smoking marijuana and tobacco can be extremely relevant. Drug addiction theories view disease as an individualized problem contained within a human body or organ that can be ‘treated’ or ‘fixed’ and ignore or downplay the influence of environmental factors (Clarke et al., 2003; Conrad, 2005). Anthropological approach to human interaction with psychotropic substances is known as the ‘cultural model’ that demonstrates the importance of sociocultural stimuli for addiction behavior (Singer, 2012). Singer (2012: 1747-1748) argues that drug addiction as a referential term appeared with the emergence of global capitalism and its desire for labor control, especially in colonial settings whereby addiction was used to label unruly and resistant subgroups. After going through different reformatory phases, medicalization was able to strip drugs out of their social or cultural contexts and portray their addiction as a medical condition rather than simple consumption of substances (Anderson, Swan and Lane, 2010). This is evident from the priority of research on the neuroscience of addiction resulting from the belief that addiction is a “chronic, relapsing, brain disease” (CRBD) (Garriott and Raikhel, 2015).

In the case of alcoholism, deviant forms of drinking at least in the US were categorized as a

disease not only by a medical "hegemony" but also several groups and organizations responsible for behaviors of chronic drinkers, wherein a form of non-normative behavior was labelled first a "sin", then a "crime," and finally a "sickness" (Ajzenstadt and Burtch, 1990; Schneider, 1978). Public and official attitudes towards alcohol consumption were shaped by a transformation of the ideals of responsibility, criminal and deviant behaviors, and the individual's relations with society (Ajzenstadt and Burtch, 1990: 127).

For marijuana, changing the discourse from criminalization to the medicolegal gave the state more power of social control at the structural, cultural, and interactional levels of society (O'Brien, 2013). At the structural level, marijuana users became patients, requiring a physician's prescription to consume it lawfully. This documentation of every buyer and seller of medical marijuana brought a once invisible section of society under the state control (ibid). At the cultural level, the medicolegal system provided a "greater degree of social order, stability and integration by relocating marijuana users into the fold of conventional norms and values" (O'Brien, 2013: 439) These structural and cultural changes allowed the state to also continuously monitor interactional processes through receipts, taxes and video surveillance, resulting in discipline and normalization (ibid).

Same is the case with tobacco, which was earlier perceived as both beneficial and harmful for health but later the discourse shifted from a socially acceptable leisure activity to an 'addiction' and a medically treatable problem (Rooke, 2013: 372). In the past few decades, smoking has been declared the leading cause of premature death in the developed world (ibid: 364). The medicalization of tobacco began with the redefinition of smoking from a leisure activity to a risk factor. The concept of nicotine addiction later introduced a physiological-pharmacological explanation of smoking behavior and smoking came to be understood as a disease itself (ibid: 372). The smoker was thus brought under the medical jurisdiction as 'potentially sick' and could be medically treated at clinics and with products such as nicotine gum and patches (Penn, 1997: 29).

These examples of medicalization of previously socially acceptable consumables provides the framework for my thesis, which draws upon personal experiences and perceptions of betel quid chewers in Karachi and Lahore to explore what betel chewing means to them and how its consumption has changed over time. The next chapter provides the methodology for my research before I discuss my results and observations in the next sections.

Methodology

This ethnographic study was based on four weeks of rapport building and fieldwork between February 18 and March 17, 2020 in two major cosmopolitan cities of Pakistan - Karachi and Lahore. Apart from participant observation at several locations, I conducted semi-structured, descriptive interviews to obtain personal perspectives of the *pān* chewers about health and cultural significance of *pān* in their life. The interviews were conducted mainly in Urdu language and recorded with the permission of the participants. The interviews were later transcribed and translated verbatim into English language from Urdu with the help of an Urdu-English bilingual native speaker.

Site selection

Pakistan serves as an example of transmigration of commodities (Ahmed et al., 2015) for studying *pān* trade and chewing habits. Karachi - Pakistan's largest city - houses over 16 million people, according to the latest although controversial census count in 2020 (World Population Review, 2020). This bustling port city, which



A view of two wholesale *pān* shops in Anarkali Bazaar of Lahore.

became the capital after Pakistan was created, was naturally the major destination for Muslims from India who wanted to settle in the new country created in the name of Islam. According to the 1951 Indian census, 7,226,000 Muslims went to Pakistan from India immediately after Pakistan's independence and continued settling here in the coming decades (Shukla, 2007). Their arrival and the subsequent settlement not only significantly reshaped the demographics but the culture, economics and politics as well. To this day, these migrants are known as *Muhājir* ('refugee' in Urdu language) - an ethnic, predominantly middle-class minority with a distinct 'Indianized' culture different from local Pakistani languages and traditions. Till the 2000s, Karachi's majority population comprised of the *Muhājir* community (Baig et al., 2015).

Today Karachi is a sprawling cosmopolitan port city where people from all over Pakistan as well as refugees from India, Bangladesh, Afghanistan and Myanmar have settled in over the decades (Borthakur, 2017). The city is known as the hub of *pān* chewing in Pakistan and people from all ages,

ethnicities and communities consume it. Since I was staying with my host's family in North Nazimabad Town, I visited several areas, food streets, roadside stalls and *pān* shops in the vicinity to find informants for my study and observe their habits of betel quid chewing. "Karachiites' love for *pān* and *cāy* [tea] is unmatched. These two distinct characteristics make them recognizable everywhere in Pakistan," my host had told me.

The city of Lahore was suggested by my participants from Karachi as a trading hotspot of imported *pān* from India, Bangladesh and Sri Lanka. My stay in Lahore lasted one week from March 6 to March 12, 2020 and I had to return to Karachi sooner than planned because of rising coronavirus cases. During this period, I visited a wholesale market in Lahore located in Paan Gali, Anarkali Bazaar to witness the wholesale trade and interviewed the stakeholders, including sellers, buyers and consumers. Both cities were suitable sites for investigating the changing dynamics of the trade and consumption of betel quid due to a great number of *pān* consumers, hundreds of *pān* shops and large wholesale markets.

Recruiting participants

Since I was staying with a native *Muhājir* family, I was introduced to six participants within the nuclear family of my host, who agreed to give interviews. Given the security concerns and especially the restriction of movement in certain areas for foreigners in Pakistan, I was always accompanied by my host during my fieldwork. However, as a female foreigner on the streets, finding participants was a difficult task in the conservative setting of my fieldwork site. More participants were found via snowballing or chain referral sampling (Mack et al., 2005). Taking into account the time limitations for conducting my fieldwork, I adopted the purposive sampling method (Mack et al., 2005), which groups the participants according to preselected criteria relevant to a particular research question (in my case, *pān* consumers).

Data collection

This study is based on 16 descriptive, semi-structured, informal interviews with casual and habitual *pān* chewers in Karachi and Lahore. Descriptive interviews helped me to understand the significance of *pān* chewing for South Asian people and processes that shaped their perceptions of substance use and health. I developed a questionnaire, including demographic data, for personal use, firstly to keep the relevant questions at hand during the interviews; and secondly to keep the focus of the interview on questions important for the research objectives.

During my fieldwork, I also visited several *pān* shops, kiosks and two wholesale markets, one each in Karachi and Lahore, for participant observation. Field notes, photographs and videos were also taken for future reference with the consent of the people. The participants found via snowballing method were interviewed at their homes while others were randomly approached at public places,

near *pān* stalls and shops and at wholesale markets.

Except for two interviews in the English language, all others were conducted in Urdu at the participants' convenience, on the day and time of their own choice. The interviews lasted between 15 and 70 minutes and were recorded simultaneously on two electronic audio recording devices for avoiding potential loss of data. Observations, surroundings and important quotes were noted down in the field diary. The recorded audio files were transcribed and translated manually from Urdu into English language with the help of a native Urdu speaker between June and August 2020. The translations and notes taken during the interviews were edited for clarity of language and ease of readability.

Participant profiles

My participants comprised 13 men and three women, aged between 28 and 79 years old. Five of my informants were *pān* sellers (all male) while 11 were *pān* consumers (seven current and four former). Four sellers chewed betel quid on a daily basis while one only ate betel leaf occasionally. All participants were informed verbally about the research and its aims and objectives before being interviewed. They were guaranteed confidentiality and informed that participation was voluntary and that they could withdraw at any time without giving a reason. All names of the participants have been changed for privacy reasons.

- Mr Hassan: Male, 34, daily consumer of *tambākū pān*, started eating *pān* recently;
- Ms Kiran: Female, 65, daily consumer of *tambākū pān*, has been eating *pān* for 30 years;
- Mr Adil: Male, 38, daily consumer of *tambākū pān*, started eating *pān* recently;
- Mr Haroon: Male, 79, daily consumer of *tambākū pān*, has been eating *pān* for more than 60 years;
- Mr Yousuf: Male, 33, daily consumer of *tambākū pān*, has been eating *pān* for 12 years;
- Mr Bilal: Male, 52, daily consumer of *tambākū pān*, has been eating *pān* for 5-6 years
- Ms Fatima: Female, 65, daily consumer of *tambākū pān*, has been eating *pān* for 30 years;
- Mr Zaheer: Male, 36, daily consumer of *tambākū pān*, has been eating *pān* for 2 years;
- Ms Yasmin: Female, 51, occasional chewer of *mīṭhā pān*;
- Mr Waleed: Male, 47, had been eating *tambākū pān*, for 10 years, quit 10-12 years ago;
- Mr Jalal: Male, 40, had been eating *tambākū pān* for 20 years, quit 2 years ago;
- *Pān* seller Tahir: Male, 31, daily consumer of *tambākū pān*, has been eating *pān* for 12 years;
- *Pān* seller Salman: Male, 28, daily consumer of *tambākū pān*, has been eating *pān* for 15 years;
- *Pān* seller Umar: Male, 60, daily consumer of *tambākū pān*, has been eating betel quid for 45 years;

- *Pān* seller Ameer: Male, 55, daily consumer of *sāda pān*, has been eating *pān* for 30 years;
- *Pān* seller Asad: Male, 61, eats only betel leaf.

Limitations

This study and fieldwork were severely hampered by the Covid-19 pandemic. By mid-February, the number of global coronavirus cases had been rising steadily but most of the countries as well as the World Health Organization had not yet introduced precautionary measures. Pakistan reported its first official case on February 26, 2020, a week after my arrival in Karachi. Since the case was also reported in Karachi, the government introduced social distancing measures and borders were closed down. As the number of cases rose, my fear of venturing into public spaces and interviewing people was obvious. Wearing masks in public places was not only inconvenient but also introduced an air of reluctance during the interviews, especially with *pān* sellers, which might have affected the quality of information.

Ethnographers encounter several barriers while working in foreign conditions not only in approaching the local population but also in bringing out relevant contextual information. Rapport building by spending some time with the participants is an essential component of gaining the trust of the informants (Glesne, 2006). The duration of my stay in Pakistan was only four weeks, thus the time available for rapport building was too short. For most of my interviews, particularly those arranged via snowballing, I was able to talk to the participants before the actual interviews. However, many interviews, especially with *pān* sellers on the streets, were impromptu.

Data analysis

All transcripts of the interviews were analyzed via thematic content analysis (Burnard, 1991). Thematic or manifest analysis is a validated approach to research about people's views, opinions, knowledge, experiences or values from a set of qualitative data (Burnard, 1991). Using the theoretical framework of experimental trajectories, medicalization and drug addiction, I used a deductive approach which involves interpreting the data with some preconceived themes expected to be found there, usually based on a theory or existing knowledge. MS Excel (v2010) was used for category formation and descriptive analysis.

Changing perceptions, rigid behaviors

Pān has acquired a ‘culturally endemic’ status in Pakistan and chewing betel quid at social or religious gatherings is a common affair. Children get their fair chance at consuming *mīṭhā pān* during wedding receptions and family gatherings. Most participants admitted having *mīṭhā pān* in their childhood but when specifically asked about their first experience of eating *pān*, they did not mention that experience but rather the one in their adulthood with a ‘forbidden’ variety. This



A bundle of packed ready-made *mīṭhā* (sweet) *pān* on sale at a *pān* shop in Karachi.

first experience of eating *sāda pān* or *tambākū pān* was often kept secret from their parents. The choice for this particular type was usually influenced by the accompanying friend. *Mīṭhā pān* was not considered a ‘real’ *pān* eating experience but a casual snack or dessert and a variety mainly reserved for children, young women or casual chewers since it did not include ‘adult only’ ingredients.

“Betel nut is usually not added to mīṭhā pān, we add it only if a customer asks for it. This makes mīṭhā pān absolutely harmless for children.” - Tahir

Betel quid, without differentiating between its varieties, has been socially acceptable for all ages and genders in South Asia, Southeast Asia, Asia-Pacific as well as among immigrants from these regions in Europe, North America and Africa (Gupta and Ray, 2004). Nelson and Heischouer (1999) noted that the habit often started before adolescence due to family influence, cultural practices and its social acceptability. In contrast, my findings in Pakistan showed that children were only allowed to eat *mīṭhā pān* while all other types of *pāns* were highly discouraged. Even when parents were regular consumers of *pān*, they forbade their children from eating even the simplest of *pān* over health concerns. The parents used to eat tobacco *pān* on a daily basis but did not allow children to chew *pān* at all; not even the ones they prepared at home themselves.

“Even though my mother ate it at home, children were not allowed to even come near the pāndān¹⁵ not because she used to hide money under it but because tobacco is harmful for children. My mother always said it’s not a good thing even though it was a part of our culture and tradition as Hindustanis... we have this addiction in our blood.” - Zaheer

The social acceptability of *pān* for women in adolescence was constructed differently as

¹⁵ *Pāndān* is a small box, usually of decorated metal, used to hold betel leaf and the ingredients for making *pān*.

compared to men for an additional reason. While both boys and girls were stopped from chewing betel quid because of its harmful effects, girls were not given *pān* also because of the sexual connotations related to reddened lips that supposedly attracted the attention of men. One woman was told in her childhood that girls should not eat *pān* until a certain age and that it was immoral for unmarried girls to eat betel quid and “sit around with red lips”. Another two female participants were introduced to the habit only after getting married in their husbands’ family. Thus, *pān* chewing for women was associated with marital status and signified not only the freedom of choice for married women but also freedom from stigmatization of sexual boldness.

First experiences

Peer pressure

Peer pressure was a common reason for starting betel quid chewing. Several participants tried *pān* at school or at university while hanging out with their friends. Waleed was in his first year of university when he started eating betel quid. Once in the evening he was sitting and chatting with his friends who were constantly chewing something in their mouths, he was the only one not eating anything. Not to feel like an outsider he asked his friends to share some *pān* with him. The betel quid he ate contained a small amount of tobacco that made him feel “very light and with a slight euphoria”. Waleed thoroughly enjoyed the first experience of *pān* chewing and did not have any side effects. *Pān* gradually became his daily routine but eventually he quit the habit “when it became too much” after getting to know what chemicals are used in the manufacturing process of some ingredients for betel quid mixture and how it can affect his health.

Zaheer was forbidden to eat *pān* as a child and his first experience of tobacco *pān* came as his best friend’s prank. He was 34 years old when he ate tobacco *pān* for the first time. It was the holy month of *Ramazān*¹⁶ of 2018 when he and his friend decided to skip the night prayers and went to see the “ship-shaped mosque in Lyari¹⁷ instead”. On the way to the mosque, his friend stopped at a *pān* stall to grab some betel quid for himself and asked Zaheer if he also wanted to try one. Zaheer asked for *sāda*, *sonf*, *khuśbū pān*¹⁸ but that was not what he got.

“I immediately felt dizzy and asked my friend what he had given me. He said maybe the seller mixed up the pān and gave you with tobacco. I felt so bad, whatever I had eaten after breaking my fast, I vomited because I had no tolerance for tobacco,” recalled Zaheer.

Apparently, the joke did not go well and the plan to visit the mosque had to be cancelled. The

¹⁶ *Ramazān* is the holy month in Islam during which Muslims fast for 30 days.

¹⁷ Lyari is one of the oldest areas in Karachi.

¹⁸ *Sāda*, *sauñf*, *khuśbū pān* is a simple betel quid with fennel seed and cardamom.

next day his friend came to meet him after *iftār*¹⁹ and started making fun of him that made him really mad. Zaheer insisted on going back to the *pān* shop and eating tobacco *pān* once again. Nothing happened to him this time so he continued to chew betel quid on a daily basis. Later he confessed to his friend that despite feeling extremely sick after the first time, after all he had “an ecstatic feeling” that overcame him and he craved to experience this feeling the next day.

Family influence

Copying the behavior of parents or close relatives were major motivators towards the desire for individuals to start the habit of *pān* chewing. When children observed their older family members engaging in betel quid chewing, initially they also wanted to try out of curiosity the ‘real’ *pān* that the adults ate with such pleasure and did not let their children close to it. Some participants recalled being punished as children after getting caught while stealing *pān* from home or while trying to buy it outside from a *pān* shop. Haroon was a four year old child when he ate his first *mūthā pān* and at 12 years old he tried *tambākū pān* for



A female participant makes a *pān* at home during the interview. A traditional *pāndān* can also be seen.

the first time. He recalled sneaking out of the house in his childhood to enjoy the *pān* stolen from his mother’s *pāndān*. Despite his first experience far from being enjoyable, he kept trying it again and again due to his “stubborn nature” until he stopped feeling dizzy anymore. By the age of 16, he had become a habitual tobacco quid chewer and could not hide this “addictive” habit from his mother anymore. His parents did their best to discourage him but the ‘forbidden fruit’ was too sweet to quit, especially when his parents themselves were not going to give it up.

More often betel quid was either eaten in a gathering with friends away from home or was initiated much later in life after marriage, particularly in the case of married women. One woman became a habitual betel quid chewer because of her husband, who was a regular *pān* consumer. After marriage, Fatima had to make several tobacco quids at home every day for her husband to take with him to his work. After a while, she started making one *sāda pān* for herself to eat and “keep busy” while preparing the daily quota for her husband to take to work. Tired of preparing a separate type of betel quid for herself, she eventually decided to switch to tobacco *pān* as well to “save the effort of making a different *pān*” for herself.

¹⁹ *Iftār* is the evening meal with which Muslims end their *Ramazān* fast.

“When I ate tobacco pān for the first time, I felt very warm. There was a sudden rise in temperature. And I felt like there was smoke coming out of my ears. I felt like this several times in the beginning but then I got used to it. I wasn’t scared to stop using it. I used to feel dizzy in the beginning and later got used to it. But I still get dizzy sometimes if I put too much tobacco.” - Fatima

Work-related motivations

Working people primarily used *pān* as a stimulant as it helped them to keep focused, active and fresh. The need in a stimulant was caused by their exhaustive working conditions and long working hours. Many reported eating *pān* to stay awake and concentrate when working till late. For example, barber Jalal remembers eating his first *pān* with tobacco when he was 15 years old and just started working in a barber shop. His employer saw him eating *mīṭhā pān* and offered him the *pān* for ‘grown-ups’. Tobacco in *pān* made him feel dizzy and woozy at first but soon it became his energy booster that “helped him stop yawning and made his hands move faster”. Eighteen working hours a day were his normal working schedule back then. These days he works 10 to 11 hours per day and does not feel the need to eat *pān* anymore.

For betel quid sellers, starting the habit at work while selling *pān* came naturally. Interestingly, none of the *pān* vendors thought they were addicted to *pān* and believed betel quid chewing to be nothing more than a just habit that they can stop any time. However, one of them said that he would not be able to work without chewing *pān* as it helps him concentrate on his work. An ethnographic study on betel quid dependence among male users in Myanmar found that betel quid was commonly consumed to suppress stress caused by exhausting working conditions and was used by unskilled workers as a drug to improve productivity (Moe et al., 2017).

Out of necessity

In recent years, the consumption of *pān* has been replaced by other tobacco-based chewing products like *guṭkā*, *mainpurī*, *māwa* and *pān parāg*. Most consumers of tobacco *pān* had shifted from chewing *pān* to these *pān* derived products because of widespread sale and production as well as cheaper options. However, in 2019 the government banned the sale, preparation, manufacturing and storage of such industrially manufactured tobacco-containing products (Mansoor, 2019), which served as the point of return for many *pān* consumers.

Many were forced to switch to *pān* after “*pān parāg* disappeared from the market” and they had no other option to satisfy their nicotine needs for the day. Adil had been eating *māwa* and *pān parāg* since his teens and only started eating *pān* when these products were banned. He tried betel quid before but never liked the taste. When the ban was announced, he saw no other option for himself

than to switch to *pān*. Adil did not notice much difference from *pān parāg* as his body was already used to tobacco. It was only the betel leaf that was missing in a substance that he used to consume before.

Hassan was also “hooked” to *pān parāg* before he had to switch to *pān*. He remembered well the first time he had tried tobacco *pān*. He was 18 years old when his close friend started taunting him that he could not eat mixed *pattī pān*²⁰. Back then Hassan did not use to eat tobacco-containing products, therefore he felt dizzy but had to control himself in front of his friend. Later in life he saw his colleagues at work eating *pān parāg* and became hooked on it. When *pān parāg* was banned in Karachi, he was already “addicted to tobacco and highly dependent on it during night shifts”. Since smoking “was not an option” for him because of his distaste for cigarettes, *pān* became the best alternative to the banned product.

Medical compulsions

Betel quid was also consumed for medical purposes. Bilal was recommended *pān* chewing with the tobacco brand of Raja Jani for insomnia. Although it did not help him much with his sleep, he instead developed a “problematic habit” of *pān* eating. Fatima’s father started chewing *pān* on someone’s advice because of his gastric problems as well as an alternative to smoking. Kiran was introduced to *pān* with tobacco because of the belief that tobacco can increase the appetite. She did not believe that betel quid actually made her feeling hungry but had a psychological rather than physical effect on her appetite. In all three cases, Gorsuch’s (1980) iatrogenic model demonstrates how people initially given betel quid for medical purposes become habitual to *pān* chewing even if the substance does not serve its medical purpose anymore.

These experiences suggest that first of all there is a gradual change in behavior from eating *mīṭhā pān* as children to trying other varieties after coming out from under the influence of parents. The choice of *pān* can be explained with the concept of experimental trajectories (Raikhel and Garriott, 2013) that consumers tried several combinations and varieties of *pān* before they decided on something that fitted their taste, mood and personality. This I have discussed in more detail in the next section.

Finding the perfect recipe

Experimental pathways

Experimenting with a wide variety of substances before committing to one kind of drug is a common trajectory among individuals. Spotts and Shontz (1980) revealed that the substance of

²⁰ Mixed *pattī pān* is a type of betel quid with various brands of tobacco.

eventual choice was usually not the drug that the person tried at first and was found through a long experimental process. In Moe's et al. research (2017) on betel quid usage in Malaysia, the substance choice for beginners was also usually influenced by the 'pressure' group and later traditional dried tobacco or industrially manufactured tobacco were added to the quid, according to the person's preferences. Similarly, Idrus and Hardon (2019) reported how in order to achieve stronger highs and avoid adverse effects, young urban Indonesians experimented with different psycho-active prescription drugs (PPDs) by mixing them with alcohol and hot food/drinks and administering drugs in diverse ways e.g., oral, intravenous injection or injection of crushed oral tablets. To find out which combinations suited them the best, young users of PPDs encouraged each other to try out different, affordable psychoactive substances. Thereby the users were involved a series of personal experiments – a process termed by Raikel and Garriott (2013) as “experimental trajectories”.

Experimental trajectories can be used to describe how novice betel chewers try out different types of *pān* (with tobacco, without tobacco or sweet *pān*) and experiment with various ingredients and flavors in order to find out the combination that is compatible with their body and does not cause side effects. Raikel and Garriott (2013) theorize addiction as a ‘trajectory’, a directed movement of subjects across the dimensions of experience and subjectivity shaped by social, psychological and biological forces and processes. They argue that addiction cannot be seen as a frozen category of a biological condition or a social affliction but rather it must be considered as a “trajectory of experience that traverses the biological and the social, the medical and the legal, the cultural and the political” (ibid: 8). Addiction may be understood as experimentation or intervention in life that may indeed be an “unhealthy selection of a chemical solution to discomforting experiences” (Singer, 2006, cited in Raikel and Garriott, 2013: 27). Thus, *pān* chewing, just like gambling, or any other “habit-forming” behavior, might be a type of self-medication by which the individual is “numbing oneself to the social world” (Das and Das, 2007, cited in Raikel and Garriott, 2013: 28).

Trial and error

After trying the choice of *pān* of their friends, colleagues and family members, *pān* chewers go through a long trial and error phase to find the exact proportion of ingredients in betel quid that suits them the best. Some experimented with the amount of tobacco in *pān* and various tobacco brands, while others tried out different varieties of betel quid before sticking to their favorite kind. Tahir, as many other *pān* vendors, started eating betel quid at work and had an opportunity to try all varieties of *pān* in the shop. “My first *pān* was *mīṭhā*,” – said Tahir, “Then I ate *sāda khuṣbū pān*. Then I started tobacco *pān*. I ate all these *pāns* on a trial-and-error basis while working here. It was just like I was making *pān* and made an extra one for myself.”

Sometimes circumstances or friend's advice rather than personal curiosity resulted in

switching from one kind of *pān* to another. Bilal started with *mīṭhā pān* with cardamom that he used to buy at the *pān* stall. Then one day *pān* sellers told him that they could not find some specific ingredients for his *mīṭhā pān*, so he had to switch to *sāda khuṣbū pān*. Then he started adding tobacco to his betel quid on someone's advice as a medicine for insomnia. "I tried *Zahoor* [tobacco brand], then I moved to *Raja Jani* [tobacco brand], then I started adding saffron sometimes and now after so many trials and errors I have started eating mixed *pattī pān*," Bilal told me. Initially he used to feel sick when he ate tobacco *pān* and tried to take out tobacco from the betel quid he bought. There was an option of shifting to *supārī* or *naswār*, but he found those products to be more addictive than *pān*. Despite the side effects of tobacco, he continued eating tobacco *pān* to overcome boredom at work in the museum where he worked as a guard. Now he describes his habit as an "addiction that is impossible to get rid of".

Zaheer's case demonstrates that inexperienced *pān* chewers gradually learn about the additives and flavors used for betel quid preparation. He usually eats *Zahoor Raja Jani pān* and sometimes adds *mīṭhī khuṣbū* to it. This flavor is called *Karānti*. He became familiar with the types of betel quid and the names of flavors after trying out many of them. Also, most of my participants including Zaheer started off one *pān* a day and gradually increased their consumption to five-six betel quids a day. As Fatima told me, she used to eat one or two quids a day in the beginning gradually increasing her dose. Now she eats *pān* "all the time", at least 5-6 *pāns* per day. It stays in her mouth until she has to perform *namāz* (Islamic prayers) and wash her mouth. After the prayers, she makes another quid and this goes on all day. In several cases of male informants exclusively, daily amount of *pān* reached up to 35-45 quids a day and was attributed to overloaded working schedule and stressful working environment.

Habitual and experienced *pān* chewers who had been eating betel quid for more than 10 years tended to decrease the consumption of betel quid or quit it entirely either at their own will, or by necessity e.g., health condition or under family's pressure, especially at wife's insistence for male participants. For example, Kiran, when she was young and new to *pān* chewing, slowly increased the amount of tobacco from one grain to two, three and then six grains until it became a pinch of tobacco and she developed a habit. Nowadays due to tooth loss she eats *pān* only on special occasions or when someone offers it to her and she cannot refuse not to be rude. She now consumes only mild tobacco and powered areca nut. This is "the best combination" that she has achieved after many years of *pān* chewing experience.

The experience of *pān* chewing, therefore, was subjective based on the individual's taste, preference and threshold for tobacco. For most, the first experience of betel quid eating was not enjoyable and they had to experiment with the ingredients through trial and error. This experimental trajectory led them to their favorite recipe.

As these findings suggest, *pān* chewing is initiated under diverse conditions and situations subjective to individual experience, ranging from parental influence to work-related stress. The common factor seems to be an exposure to *pān* from a young age and a better social acceptability than smoking and other intoxicants. However, the social acceptability of *pān* chewing in Pakistan varies for genders and age and is different from previous findings where children were allowed to eat tobacco betel quid. None of my participants were permitted to eat any *pān* besides *mīṭhā pān* in their childhood. Those who started the habit as teenagers could not do so openly and had to hide it from their parents. Almost half of my participants initiated betel quid chewing as adults (after 18 years old) after coming out of their parents' supervision or after getting married in case of women. As evident, social acceptability of *pān* has changed in recent years. In the next chapter I will discuss how medicalization of *pān* affected this change in social acceptability of the habit by public portrayal of *pān* and its related products as health hazards.

Semantics of *pān* chewing

The recent increase in betel quid prices has forced many consumers to significantly reduce their daily quotas of *pān* from between 12 and 30 to just 3 to 4 a day. In Karachi, the cost of one tobacco *pān* ranges between 15 and 25 rupees, depending on the location of the shop and the type and size of *pān* leaf. *Baṅgla pān* leaf imported from Bangladesh was the biggest variety of betel leaf that made the *pān* cost Rs25. About 18 months earlier, the price of one *tambākū pān* was between Rs5 and Rs10, which means that the price has tripled over this period of time. According to one participant in Lahore, a tobacco *pān* cost him 10 *paisas*²¹ back in 1957 when he started while nowadays a smaller *tambākū pān* cost him 10 rupees. Because of substantial customs levy, imported *pān* leaves are several times more expensive than the local ones and give much less profit to the sellers. *Pān* vendors in Lahore's wholesale market claimed the price increase was caused by the political tensions between Pakistan and India, from where betel leaf and areca nut are imported. Whenever political tensions between the two countries flare, the freight train between Lahore and New Delhi stops its operation, resulting in shortage of supply and immediate rise in prices. In such situations, *pān* traders have to rely on betel leaves imported from Bangladesh, Sri Lanka and Thailand as well as on a locally grown variety. At the time of my interviews, all *pān* vendors from Karachi and Lahore were selling and preparing only Sri Lankan and Pakistani betel leaves that differ greatly in size, taste and price.

Suddenly, *pān* has become a “needless expense” and a “waste of money on an unnecessary hobby” that was chewed “just for pleasure” and not because of addiction as it could be “easily stopped”.

“People are eating it as enjoyment and can stop willingly. For example, when betel nut became expensive recently, the pān shops became empty as people stopped eating pān.” - Adil

Addiction vs habit

A noticeable distinction between addiction and habit of betel quid persists in the consumers perception with clear differentiation between addiction (*naśā*) of tobacco and habit (*ādat*) of betel quid. The *tambākū pān* was considered addictive because of the “addictive properties” of tobacco alone and *sāda pān* and *mīṭhā pān* were classified as non-addictive varieties of betel quid. The experience of addiction to betel quid with tobacco was correlated with consumption of up to 30-40 quids a day and noticeable withdrawal symptoms or craving when the consumer could not chew *pān* for varying reasons, including trying to quit chewing *pān*. Tobacco *pān* users described their day without *pān* with different physical and psychological effects such as feeling dizzy, weak, sleepy, drowsy, lazy and angry.

²¹ 100 *paisas* make one Pakistani rupee.

“If I don’t eat pān, I don’t feel interested in my work and there is a strange feeling of emptiness. When you eat pān, everything starts clicking again and you become normal. Sometimes you also become angry and pān calms you down.” - Waleed

“If I don’t eat pān for two-three hours I feel sleepy, drowsy. My head starts feeling strange and I get lethargic. But it usually doesn’t disturb my routine except for Ramazān. By the evening my brain becomes slow. I feel like forgetting things.” - Fatima

During the Islamic month of *Ramazān*, it is mandatory for all Muslim adults, with some exceptions for sick and traveling individuals, to observe a fast from sunrise to sunset whereby no food or drinks can be consumed. For *pān* consumers, the abstinence from quid for these daytime hours determined whether the individual was addicted or a habitual chewer. This is the longest period of time when the betel consumers have to refrain themselves from eating *pān*. Although my participants claimed “easily staying without betel quid” all day long since they were not addicted to it, they admitted that the first thing they ate immediately after the fast ended was a tobacco quid. Experiencing difficulties in quitting *pān* completely was another important indicator of tobacco addition. Hassan tried several times to quit betel chewing because of “health concerns” as well as disapproval of the habit from his wife and parents. Every time he went out with friends or went to work, “he could not resist” when someone else was chewing *pān* beside him, so he restarted the habit. Zaheer experienced the same cravings when attempting to quit *pān* and compared it to an animal instinct.

“...for 2-3 days I tried to abstain but the desire was so strong that even if I suppressed this desire, when I saw a friend or a neighbor holding pān in his hand I snatched it from them; just like a cat stealing a piece of meat from the kitchen without giving it a second thought.” - Zaheer

Another participant took his relationship with *pān* to a philosophical level, describing it as a matter of life and death.

“Friendship between pān and man is till the grave. Just like cigarette smokers who don’t leave a cigarette, pān is something that ones you start, it is very difficult to stop.” - Bilal

For others, *pān* was a leisure activity or habit rather than an addiction. They believed not to be physically or psychologically dependent on *pān* or tobacco because they did not experience any serious withdrawal symptoms apart from minor itches or headaches and could stop the practice for the whole day or sometimes even for several months without feeling much differences in their mood and wellbeing. Drawing a thin line between habit and addiction, *pān* vendor Tahir described his habit as a “development of taste for betel quid, a pleasant everyday activity and an urge to chew something”. If there was no *pān* available, it could be replaced with areca nut that would give a similar feeling of contentment of chewing something.

Although betel quid eating was not considered necessary for them, it still was a part of their identity they would not like to part with. One such conversation demonstrates the importance of this

habit that a participant pitted stopping *pān* against divorcing his wife. Haroon's mother-in-law wanted him to take a vow to stop chewing *pān*. In turn, he put up a condition that if he leaves *pān* he would leave his wife [her daughter] as well. After that incident the woman never asked him again to quit betel chewing.

Perceived benefits

In the Pakistani context, both *sāda pān* and *mīṭhā pān* were perceived as harmless varieties of betel quid unlike tobacco *pān* that was believed to either have negative effects on health or have neither apparent benefits nor harm. Although for betel quid chewers risk factors associated with tobacco *pān* outweighed its advantages, tobacco in betel quid also acted as a stimulant to “restore energy and activate brain activity”. *Sāda pān* was being used as a medicine for improving digestion, strengthening teeth and controlling blood glucose level:

“...[my friend's] sugar level does not go up a certain limit because of pān. He eats chocolates, sweets, everything but eats 10 pāns a day [as his insulin].” - Adil

Beneficial effects of *pān* were closely related to its moderate consumption. Betel quid was advantageous only in a limited quantity, especially for indigestion, but its excessive use was harmful “just like any other substance [in excess]”. However, the limit for excessive use varied and every individual set their own amount according to age and gender. While 30 to 40 *pāns* a day was an “unhealthy amount”, for some others even eating 5-6 betel quids a day was also too much.

“Even if a doctor recommends calcium to you, they recommend a specific dose, not like just keep on eating it the whole day. I mean to say anything that is in excess is harmful and can lead to problems and is wrong. If you eat one pān as an after-dinner snack as you like whether it's mīṭhā pān or sāda pān, it is alright.” - Kiran

Chewing tobacco *pān* could be also acceptable unless it was consumed on a regular basis.

“Eating pān itself like people who eat it occasionally is not problematic. Or even eating tobacco pān rarely may as well be fine. But regular pān chewing whether or not with tobacco is harmful for health.” - Hassan

Interestingly, the participants did not mention any health advantages of betel quid apart from digestion aid until they were asked about different ingredients separately. Individual ingredients in *pān* were admitted to be good for health. Betel leaf was used as a natural remedy for treating liver and asthma, removing bad smell, relieving chest congestion and stopping bleeding. For relieving chest congestion, a small amount of mustard oil could be warmed up and rubbed on a *pān* leaf to be put on the chest of the patient.

“...betel leaf can be used in tea which is helpful for cold, flue and old age tremors.” - pān seller Asad, who ate betel leaf alone as a habit.

Betel leaves, juice and the stem of the betel vine were known to be used for the preparation of several Ayurvedic and Unani medicines. Lime was reported to be beneficial because it contained calcium, which is beneficial for strengthening bones. Catechu was used for its antiseptic values and for treating mouth lesions. Some aromatic additives such as clove, cardamom and fennel seed were known for their medicinal benefits as well. Fennel seed, in particular, works as a digestive aid when consumed in normal quantities. Sometimes, licorice root (*mulethī*) was added to betel quid not only to improve the taste of *pān* but also to soothe sore throat. Even tobacco was perceived to be useful for gastric problems despite its harmful effects. Apparently, each of these ingredients have been traditionally used for medical purposes but they were believed to diminish their health benefits when combined together in a betel quid, especially when such “harmful” ingredients as betel nut and tobacco were added.

“...when all these things are put within pān, it does not have the same effect which separate ingredients can have.” – Kiran

Physical harm

The disadvantages of *pān* eating were perceived on two levels: physical harm and visible/aesthetical harm. Physical harm or harm to health was attributed to “hazardous ingredients” such as tobacco, areca nut, lime and catechu that were associated with many diseases including mouth cancer, kidney stones, tooth decay and ulcers. Despite possible harm, *pān* was considered as a much safer alternative to tobacco-containing industrial products such as *guṭkā*, *māwa* and *mainpurī* that were believed to contain a lot of lime, tobacco and areca nut of low quality.

My participants did not know anyone personally who had developed a serious disease like cancer after eating betel quid alone. On the contrary, industrial products were known as carcinogenic because some of their friends who chewed *guṭkā* had died from mouth cancer and they had “heard a lot of news of *guṭkā* chewers” getting hospitalized with oral cancer. To prevent the development of ulcers and tooth decay after chewing *pān*, it was advised not to keep the quid in the mouth overnight, and rather spitting it out and brushing the teeth after chewing. However, when *pān* was chewed in large quantities on daily basis, good oral hygiene was not sufficient to prevent the diseases.

“People who eat a lot of pān like me lose their teeth by my age [65]. When my teeth fall off, they are completely black because I have eaten so much pān that there is nothing left in the teeth.”
- Kiran

Tobacco and betel nut were considered to be the most dangerous ingredients in betel quid. The former was associated with cancer while the latter was mostly linked to the formation of stones in kidneys and the gall bladder.

“[In local cuisine] areca nut is used as a meat tenderizer, [imagine what it can do inside the

human body].” - Tahir

Several friends of Zaheer had developed kidney stones after eating *pān* that contained areca nut. He described how after swallowing betel nut, its particles settle in the kidney and form stones. Other participants believed the nut can be also harmful for teeth and lungs. For this reason, Haroon stopped adding it to his *pān*. He also heard from doctors that betel nut and tobacco can be a cause of cancer but he argued that even those who had never smoked, eaten *pān* or drunk alcohol, had suffered from cancer, so you “never get to know the actual reason of the disease”.

Lime in *pān* was known for cutting the insides of the mouth and leaving wounds that could result in ulcers or even cancer. One informant, who developed ulcers some time ago, said her doctor advised her to stop consuming tobacco for some time. Later the situation worsened and the doctor asked the woman the exact composition of her *pān*. She replied that she chewed *pān* with lime only, and the doctor explained that “lime creates a cement-like layer in the liver and when this layer breaks or is removed, it leads to even more painful ulcers”. One dentist told another participant that when lime was mixed with sugar, it formed a strong mixture similar to cement. “When people chewed *pān* with lime and ate sweets or drank sweet tea after the quid, this ‘cement’ got stuck to their teeth and formed clumps in the stomach”, the dentist told him.

Catechu was reported to be harmful for kidneys because it was adulterated with chemicals during commercial productions. Zaheer felt disgusted when he got to know that when catechu had become expensive, some “*pān* vendors started adding brown shoe polish” to it to increase its quantity. In fact, fear of contamination in various ingredients for betel quid was common. Betel nut was believed by some to be treated in sulfuric acid to make it softer by manufacturers. Yasmin’s father worked as a health officer at the Karachi port and strictly forbade his children from even touching the widely available product. Her father told her that “the companies buy such things because they get it cheaper and they sugar-coat it to sell to general public”.

Despite the distrust in the quality of industrially manufactured ingredients as well as of betel quid made by *pān* vendors at the market, few consumers actually made *pān* at home. The tradition of making betel quid at home has considerably died out as street *pān* gains more popularity. Few families still keep *pāndān* at home because making betel quid at home is “time-consuming”, “expensive” and “takes a lot of effort”. Also chewing *pān* is discouraged by family members especially inside the house. Haroon’s wife stopped making *pān* at home to force her husband to quit chewing *pān*. Initially he started to make the quid himself but since it was difficult to keep the ingredients fresh, eventually he started buying betel quid from bazaar and even sold the *pāndān*.

Betel quid consumers were particular about the choice of a *pān* shop as they had only one or two betel quid sellers near their home or their work place, who they trusted and who knew their preferences of *pān* well. Since *pān* is not a standardized product and every customer decides for

himself what ingredients and in which quantity he wants to have in his betel quid, *pān* vendors usually make it in front of their clients. Women who made *pān* at home admitted that even though they ate betel quid occasionally at weddings, gatherings or from *pān* stalls, it did not match their taste preferences because of the quality of and a different proportion of ingredients. For their home-made *pān* they usually purchased raw catechu and lime in the market in bulk for one month ahead and dissolved them in water to make a paste before applying it on betel leaf. *Pān* vendors were accused of mixing catechu with milk, lime and sugar while cooking that made its taste not the same as the home-made catechu. Most of the ingredients that *pān* sellers use for making betel quid, and catechu in particular, were supposedly contaminated and considered the cause of many diseases.

“If we make clean and hygienic pān at home, we won’t have any problems. I had seen my parents eating it since my childhood. And they never had any problems. My father died in his 90s and ate home-made tobacco pān till the end. He didn’t get any mouth cancer or any other health problem. These days everyone says that pān causes mouth cancer but he never ate pān from bazaar.” - Fatima

A *pān* seller from Lahore narrated how *pān* was transformed from a medicine into poison during the Mughal times. According to him, there was a Mughal queen whose mouth smelled bad and one *hākīm*²² prescribed her eating *pān* leaf to kill the smell. But betel leaf had a little bit spicy and bitter taste, so people started adding lime to it to remove the bitter flavor. However, lime was so strong that it cut the insides of the mouth. Then to reduce the heat of lime, they added imported from Myanmar catechu that resulted in reddening of lips. Since there was no lipstick in those days, *pān* was popularized not only because of its medical benefits but also for beautifying the lips. Eventually *pān* became publicly available and its production turned into business.

Comparing *pān* eating habits of people in “old times” with the way it is consumed nowadays, betel quid chewers never encountered any health problems because they used only natural and organic products to prepare *pān* and made many ingredients at home. For instance, betel vine was grown in the yard, catechu was prepared at home and locally grown varieties of tobacco (e.g. grown in Pakistan’s Mardan district²³) were sundried at home to be crushed. Artificial tobacco and catechu manufactured nowadays were dangerous because they contained various chemicals.

“...natural things are never harmful but synthetic things always have side-effects. If pān comes back to its original shape, there is no harm in it. Even if it becomes a habit. But these ingredients are poison.” - Waleed

In retrospect, the spread of diseases was linked with the commercialization of *pān* production and adulteration of separate ingredients. This comparison of old organic home-made *pān* to new

²² *Hākīm* is a Muslim practitioner, especially of Unani medicine.

²³ Mardan is a district in Mardan Division of Khyber Pakhtunkhwa province in Pakistan.

artificial and harmful betel quid demonstrates the rising ‘alienation’ of *pān* chewers from the betel quid production and cultivation. Tsing (2015: 121) defined alienation as a process in which “things are torn from their lifeworlds to become objects of exchange” in a capitalist society. Consequently, when *pān* became a commodity and its ingredients started being industrially manufactured, betel quid chewers distrust grew in product quality as they were not involved in its production and preparation anymore.

“Pān itself is not harmful but when it becomes a business and people add lime, betel nut and God knows what in it, it becomes poisonous.” - Asad

Aesthetical harm

Visible or aesthetical harms of *pān* was linked to its detrimental effects on the appearance of the consumer and the smell of betel quid, especially tobacco quid. Even when it was considered harmless for health, a major issue with the quid chewing habit was the staining of teeth.

“If it didn’t stain the teeth, there is no better thing than pān. There is no apparent harm in pān, only addiction is problematic.” - Bilal

People who did not eat *pān*, especially the partners and family members of quid chewers, were more disgusted by the habit than the consumers themselves because of health concerns as well as modern aesthetical standards. *Pān* was considered a bad habit and influence since it left the teeth red and a smelly breath. Husbands going home were specially told by their wives to clean their mouths before entering the house. Men were particularly careful about not eating *pān* at home because their mothers and wives were skeptical about a bad influence on children.

“My family says it makes my mouth dirty, the teeth stained even though I don’t spit it at home. My wife is the most irritated by this habit. She always questions why do I eat pān. She warns me always that if I eat pān today, my kids will also eat it tomorrow.” - Yousuf

Hassan’s wife was present at his interview and she commented that apart from harmful effects of tobacco what makes her disgusted was the ugly look of a habitual *pān* eater whose mouth stinks and teeth are stained red permanently. The consumers admitted that they had to adjust their *pān* chewing habits according to other people around them not to make them feel uncomfortable. *Pān* had to be spat out while working with clients or attending business meetings with their colleagues.

Public spitting of betel juice was associated with uncouth behavior [*badtahzīb*] that was



against modern aesthetics and hygiene:

“They spit everywhere. Sometimes the spit is so large that you feel like a chicken was slaughtered there, it is so red. For the healthy hygienic society pān doesn’t match with that. It is dirty, it is filthy. So it is not hygienic and causes also filth around you.” - Yasmin

The modern concept of cleanliness of public spaces as well as aseptic homes and workplaces was an influential motivating factor for consumers to start swallowing the *pān* juice for the fear of being labelled *badtahzīb*. Swallowing the juice, especially with tobacco, was considered an unhealthy practice but the desire to keep the place clean and in aesthetic order was more dominant than the health aspect. Some consumers designated a specific place for the “dirty practice” where they spitted away from the prying eyes of the public.

“I do not spit pān anywhere whether at home or outside. I have always swallowed the pān mixture. I hate it when people spit outside in public areas and make the streets dirty. I don’t have any problems swallowing tobacco and I still do it at this age as you can see.” - Kiran

At the same time, the practice of swallowing betel juice was considered healthy in an usual way.

“I usually swallow the pān. I feel awkward spitting it out as it makes the place dirty. There is already so much pān stains on our streets and walls. Swallowing pān and tobacco is more efficient as everything stays in and might kill the bacteria inside.”- Adil

These findings suggest that the aesthetical discourse about *pān* chewing has changed in a way that the practice which was in itself considered an art among noble families is now seen as a “habit of working-class people” who are “less educated” and “unaware of the etiquettes of *pān* eating”.

“You should know the aesthetics of pān-eating like people in old times, who ate small pān, and did not stain red their lips not like today that the pān is bigger than your mouth that stays in your mouth forever.” - Waleed

Until 30 years ago, *pān* eating was a family affair. The elders, especially grandmothers, were the patrons of *pān* making and distributing among the family members. A set of rules and etiquettes were followed by everyone consuming the quid. A special utensil called *ugāldān* (spittoon) was a permanent feature at the house of a *pān* eating family. The betel juice was spat inside this utensil and once it was full, the contents were disposed of. Apparently, the dynamics of *pān* moving from the inside of the house to the public sphere could have resulted in this aesthetical disassociation. This change of public discourse also must be influenced by the popularization of the “germ theory” since the late nineteenth century, whereby cleanliness became associated with the absence of disease (Curtis, 2007). *Pān* as a refreshing snack considered clean and healthy eventually became associated with dirtiness, unhygienic and unhealthy behaviors because of the change in aesthetical sense propagated by rise in science and public health research.

Conclusion

In this thesis, I have argued how the sociocultural phenomenon of *pān* chewing is perceived in modern-day Pakistan. By tracing the history of betel quid chewing since ancient times and observing the practice in Karachi and Lahore, I tried to demonstrate how a once culturally significant and aesthetic habit with many health benefits has come to be considered as a hazardous, addictive and publicly inappropriate activity. My findings suggest that medicalization of betel quid chewing has changed the way it is perceived in the Pakistani context, which is evident from the beliefs and attitudes of my participants related to betel quid's decreasing social acceptability, rising fear of harmful effects, and its association with addiction, diseases and bad manners. Even through the primary motivations of *pān* chewing were based on social, cultural and professional working environments, the health concerns of *pān* chewing were still relevant for consumers. They justified their habit of *pān* chewing by comparing betel quid with other "more harmful" products like cigarettes, *guṭkā* and *pān parāg* while pointing out benefits of *pān* ingredients individually. The sociocultural significance of *pān* chewing can be traced back to the migration of Indian Muslims to Pakistan after 1947 who preserved the habit within several generations. Similar to the observations of Mukherjea et al. (2012) about the use of smokeless tobacco products among South Asian migrants in the US, the *Muhājir* community in Pakistan continues *pān* chewing as symbolic practice to maintain their culture and express their ethnic identity in a new social environment.

Social, medical and aesthetical perceptions of *pān* eating in Pakistan depending on the consumers' age and gender are manifested in the very initiation of the habit. Children and young women are only allowed to chew *mīṭhā pān* and *sāda pān* that are considered to be harmless, while *tambākū pān* is a strict taboo. Their first experience of the forbidden products often takes place secretly either out of curiosity or under peer pressure. Older people usually consume stronger varieties of betel quid that contains more tobacco and betel nut. Therefore, the consumption of tobacco *pān* symbolizes adulthood and maturity and even when the first experience of betel quid chewing is quite unpleasant, they find their perfect combination via the "experimental trajectory" of ingredients and their quantities.

I also observed significant gender differences in the sociocultural ethos of *pān* chewing. Elderly women preferred to make *pān* at home and played an important role in keeping alive the family tradition of *pān*-making at home. The home-made betel quid was prepared according to their personal taste, was considered much more hygienic and supposedly did not lead to problems with health. On the contrary, men mostly bought *pān* at the market, which can be explained by the ease of access and availability by the roadside and near their workplace. However, there was a noticeable distrust in *pān* made by betel quid sellers due to poor quality of the ingredients that could be related

to the growing alienation of *pān* consumers from betel quid production. Further studies on spatial gender segregation with respect to *pān* preparation and chewing would be useful to find out how commercialization of *pān* in the patriarchal South Asian society has transformed the female role of making fresh betel quid at home for family members and guests into a male-dominated commercial business.

Although the social acceptability of betel quid eating is evidently decreasing, addressing only negative health outcomes of the substance may not be adequate to reduce *pān* consumption among habitual chewers. Taking into account cultural and historical significance of the habit, more socially and culturally appropriate public health campaigns are needed. Apparently, the focus on tobacco and its negative health outcomes in public health research has medicalized all forms of tobacco products ranging from cigarettes, cigars and shisha to *guṭkā*, *māwa* and *pān*. The categorization of betel quid among harmful tobacco-containing products stems from the reductionist biomedical approach, which strips the substance from its social and environmental context. Labelling betel quid hazardous like many other medicalized products may have to be reconsidered because a) it is not a standardized product and exists in many shapes and colors and usually contains individually customized ingredients according to the consumer's taste; and b) the sociocultural norm of *pān* chewing dominates the consumer discourse and health concerns do not demotivate them. As observed previously in the context of smoking, public health research ignores the complexity of human beings "whose ideas about what makes them who they are and able to live well may not necessarily be related to what makes their bodies healthy" (Macnaughtona, Carro-Ripaldab and Russell, 2012: 457). Considering the global prevalence of *pān* chewing, further mixed-methods research on betel quid chewing could be helpful to correlate gender, age and socioeconomic status with differences in the experiences and perceptions of the habit among different *pān*-consuming communities.

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Declaration of authorship

I hereby declare that my thesis with the title:

Deconstructing *Pān*: Betel Quid's Journey from a Medically Beneficial Snack to a Cancerous Drug

1. is the result of my own independent work,
2. makes use of no sources or materials other than those referenced,
3. that quotations and paraphrases obtained from the work of others are indicated as such,
4. and that I have followed the rules and recommendations stated in Heidelberg University's guidelines on „Verantwortung in der Wissenschaft (Responsibility in Science)“.

Heidelberg 22.02.2021

Signature: Daria Peshcherova