Chapter 5 Geographical Context and Cultural Practices Affecting Smoking



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Abstract This chapter examines how cultural practices have influenced smoking in China with specific reference to regional and rural contexts. Particular attention is paid to cultural norms and practices and regional cultural differences. Consideration is also given as to why smoking is higher in the countryside and the importance of cultural and socio-economic factors in this context. Finally, given the rapid urbanisation of China, an assessment is made of the impacts of rural-urban migration and the discriminatory *hukou* system on the smoking behaviour of rural residents in new urban destinations.

Keywords Confucianism \cdot Cigarette gifting and sharing \cdot Cultural norms \cdot Hukou \cdot Patriarchy \cdot Patriotism \cdot Rural smoking \cdot Rural-urban migration \cdot Self-exempting beliefs \cdot Structure-culture

5.1 Introduction

Beyond individual health hazards, the public health and economic toll from tobacco consumption have led scholars and policy makers to regard tobacco smoking as a multilevel health emergency. The course of development and impacts of this are rooted in structural factors beyond individual health behaviours and psychological

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© The Author(s), under exclusive license to Springer Nature Switzerland AG 2021 R. Barnett et al. (eds.), *Smoking Environments in China*, Global Perspectives on Health Geography, https://doi.org/10.1007/978-3-030-76143-1_5

processes. Based on research into the socioecological determinants of health, the mechanisms of substance use behaviour lie at three distinct levels: the macro-level factors as manifested by GDP, urbanisation and population growth, which reflect the historical and social context of tobacco smoking; meso-level factors that operate in intermediate settings and connect individual persons to the broader macro-level structures of society, such as local public resources or the siting of tobacco outlets in the community; and, finally, individual-level social, demographic and psychological characteristics. Apart from this last level, the other two major aetiological platforms of substance use reflect structural forces that may operate without individuals' conscious realisation.

This chapter examines how cultural practices have influenced smoking in China with specific reference to regional and rural contexts. It can be considered a preliminary to Chap. 6 which follows on by examining the impact of urbanisation on smoking. With this in mind, the chapter is organised into three main sections. First, we focus on the cultural context of smoking in China paying particular attention to cultural norms and practices and regional cultural differences (Sect. 5.2). Second, we focus on rural areas and consider why smoking is higher in the countryside and the importance of cultural and socio-economic factors in this context (Sect. 5.3). Third, in Sect. 5.4, we examine the process of rural-urban migration and the impact of the discriminatory *hukou* system on the smoking behaviour of rural residents in new urban destinations. This section provides a link to Chap. 6 which specifically focuses on the impacts of urbanisation on smoking, the processes involved and how these are altering its social distribution.

5.2 Smoking and the Chinese Cultural Context

Cultural perspectives are important within contemporary health geography, and provide another lens on how people interpret the world and respond to social practices, including smoking and other forms of consumption. Despite debate over what constitutes culture, in a general sense, geographers are likely to understand the term as representing a whole litany of ideas and behavioural traits that include cultural beliefs, value systems, lifestyle practices and even material artefacts (Pow 2017). Culture can also be seen as a manifestation of the power relations between various groups, and the structure through which social change is constrained and enabled. This is now recognised in western contexts where tobacco control efforts are increasingly adapted away from 'one size fits all' to encompass the specific needs and desires of different cultural groups.

Engaging with cultural concerns is particularly important. Of course the more general question can be raised regarding the extent to which cultural factors influencing smoking are unique to China or are present in the wider Asian region or LMICs in general. Certainly differences in sex role norms and general expectations concerning gender-appropriate behaviour have resulted in marked gender differences in smoking in China as well as in other South and East Asian countries (see

Chap. 2). But other social practices, such as cigarette gifting, appear to be more an outcome of the Chinese cultural context and reflect specific political and institutional factors. The following section, therefore, discusses a variety of cultural practices in China that encourage the persistence of smoking and locates them within the national and wider global setting.

5.2.1 Smoking as an Extension of Confucian Culture

The culture of tobacco smoking can be traced from historical to contemporary Chinese society. The infusion of smoking as a gesture of hierarchical deference into Chinese culture is intimately related to the Confucian idea of 'knowing one's place' that is evident also in much of the rest of Asia (Kim et al. 2005). Confucian tradition still provides the standard mode of thinking and way of life in China. The writings of Confucius (558–479 BC), who lived during the 'Spring and Autumn Period', considered to be a glorious time in Chinese philosophy (Park and Chesla 2007), can be seen as a code of ethics that prescribes modes of behaviour in families and communities. As Confucius wrote at a time of conflict and social disintegration in China, Confucianism, therefore, is often seen as a set of values promoting greater peace and trust and higher levels of civilisation.

Within Confucianism a set of basic virtues were important: *ren* (altruism, humanity), *yi* (integrity and uprightness), *li* (etiquette and propriety), *zhi* (wisdom) and *xin* (trust) (Park and Chesla 2007). Embedded within these values are five basic relationships: between father and son, between husband and wife, between sovereign and subject, between the old and the young and between friends. Through these relationships Confucianism provided a simple guide for ordering family and society.

However, the values that guide Confucianism have been criticised on many counts, particularly for their impacts both on personal and state behaviours. The virtue of li, for example, has been seen as largely a hierarchical concept in which individuals should know their social position and act accordingly. This has had ramifications for the growth of authoritarian values in Chinese culture both within the family and the state. The patriarchal nature of gender roles and between husband and wife and within the extended family has had behavioural implications which persist today. Similarly Confucius' belief in the importance of ritual in orienting people, so that social institutions and everyday relationships could flourish, similarly institutionalised different forms of behaviour. Important here has been cigarette gifting and sharing. This is also reflected in the concept of xin, where respect and the development of proper social etiquette are important components of social relationships.

5.2.2 Adoption of Smoking and Cultural Resistance

While one can see Confucian values underpinning some of the cultural forces promoting contemporary smoking in China, they also shaped the early social distribution of cigarette smoking after its rapid adoption following the Treaty of Tianjin in 1858 (Hermalin and Lowry 2012). The forces of modernisation and colonial control weakened the traditional Confucian values that had guided China for so long, particularly the role of women in Chinese society and their freedom to smoke. However, it could be argued that, at the same time, they also encouraged the development of a modern social etiquette, so that by the time of the Qing dynasty in the eighteenth century, tobacco had become incorporated into the higher echelons of Chinese society in culturally specific ways (Du 2000).

Among the elite, tobacco was regarded by merchants, artists and scholars as a substance that could express hospitality, concentrate thoughts, enhance sexual pleasure and maintain or restore health. High-end tobacco, grown in particular regions, and marketed by specialised tobacco retailers, was distinguished by particular brands, such as Yongding, in the eighteenth century. This became popular among the elite after being declared as a 'tobacco fit for imperial consumption' (Benedict 2011, p. 58). The infusion of tobacco first among the Chinese elite thus reflected a common theme in the diffusion model (See Chap. 2) of promoting smoking as not only a desirable social attribute but also one that enhanced health and other personal qualities. Zhang (2005) has employed Bourdieu's notion of distinction to show how the status of opium, as an exemplary symbol of the gentry class, was vigorously defended by the social group that possessed it in late Imperial China. Dikötter et al. (2002) also argued that, besides its assumed medical benefit, the quick and widespread acceptance of tobacco in China was closely associated with the phenomenological meaning of smoke (air, or qi) found in Chinese folk religion's evil-dispelling ceremony. This mythical form of belief persists, and culminated when, in the 2003 SARS outbreak, people circulated the message that smoking cigarettes and burning incense could protect individuals from SARS (Tai and Sun 2011). This may have also have been true of reactions to COVID-19. Early reports from China on the clinical characteristics of COVID-19 patients admitted to hospital found that the proportion of smokers was less than expected based on the estimated national prevalence of smoking (Huang et al. 2020).

Although Confucian values of social harmony and etiquette may have enhanced tobacco consumption among the elite, this was not the case with gender distinctions in smoking. After 1800, although women smoked, they were encouraged to do so in the privacy of their own homes and to avoid strong tobacco smoke by using longer water pipes (Brook 2004). By the late 1920s and early 1930s, the desire to reassert Confucian values, coupled with a resentment against foreign domination and western values, resulted in the beginnings of countervailing forces especially with respect to cigarette use by women. As Hermalin and Lowry (2012) have indicated, the forces of modernisation were not unidirectional and, for women in particular,

traditional Confucian values reasserted themselves in affecting the subsequent diffusion of smoking in Chinese society (see Chaps, 2 and 3).

5.2.3 Cultural Processes in Contemporary China

Despite rapid economic and political change in China since the 1930s, cultural factors, many associated with traditional Confucian values, remain important. Thus, an understanding of these, in addition to the socio-economic processes discussed in previous chapters, is important in helping explain the rise, and continued high prevalence, of smoking in China. It is to a more detailed analysis of some of the different cultural patterns that we now turn.

5.2.3.1 The Role of Gender and Patriarchy

Confucianism, which values family harmony and considers a patriarchal family order as the basis of harmonious gender and intergenerational relations, has traditionally dominated Chinese family life (Mao 2013). Under such arrangements women were designated as socially inferior and subject to their husband's wishes, but also pressured to prioritise their parents' needs above their own. Mao (2013) showed that young mothers generally had limited control over their household space and limited ability to influence the smoking practices of their husbands and extended family. The consequences were increased exposure to second-hand smoke both for mothers and their children (see Chap. 9). Only in some cases have women, as bearers and carers of children, been able to use this status to subvert the preeminence of men in domestic environments (Mao and Robinson 2015). Confucian values have not only limited women's power within traditional households but also affected their own propensity to smoke. As we showed in Chap. 2, during the early twentieth century, Confucian cultural traditions came into conflict with emerging women's identities, restricting women's ability to smoke. That a similar pattern of smoking is evident in Japan and Korea, two countries with strong cultural affinity to China, is used to buttress the argument (Hermalin and Lowry 2012).

The strength of patriarchal family relationships, however, varies internally within China according to different regional and urban-rural contexts (for a discussion of the latter, see Sect. 5.3.2.1). From a regional perspective, due to a long history of ethnic and racial amalgamation between local residents and various nomadic groups, the northern Han culture boasts a machismo ethos that highly values loyalty to friends and leaders, solidarity among unrelated 'brothers', bravery and, ultimately, risk-taking behaviours. As documented in the literature, this hypermasculinity culture can facilitate a wide range of deviant behaviours, including substance use (Zheng 2006). Southern Chinese do smoke, but, lacking the machismo motifs found in the northern culture at the same level of smoking, southerners may face less pressure to smoke from peers who are less embedded in patriarchy.

Therefore, the intended sense behind smoking as a social action, the cultural motivation masked by the expressed discourse, may be entirely different between smokers from the two broad regional cultures. Certainly, to say that southern culture is qualitatively different from the north risks the danger of overgeneralisation and ethnocentrism, and there are socio-organisational causes beyond the cultural ones why southerners may smoke less when controlling for socio-economic influences. For example, the north tends to have smaller units of blood-related kin organisations compared to the south. Under the current collective ownership with pieces of the land contracted to individuals (Household Contract Responsibility System), the farms in the north scatter into small units due to the smaller family sizes. Comparatively, the southern villages are often single-named, inhabited by people with the same surname except for a few immigrant households. Thus, social relationships among northerners tend to rely on unrelated non-kin peers, while for southerners' familial hierarchical embeddedness tends to be stronger. As a result, smoking behaviour in the north is more likely to be a more important part of non-kin peer networks.

5.2.3.2 Sharing and Gifting Cigarettes

As a cultural practice, the gifting and sharing cigarettes is a well-accepted practice in China where it is rooted in Confucian expressions of courtesy and respect (Chu et al. 2011; Peng and Lingling 2017). Rarely seen in other cultures, and uncommon in western countries, sharing is a long-standing and well-accepted cultural practice which dates back to the Qing dynasty (1644–1912) when officials would regularly share pipe tobacco with each other (Benedict 2011). Collectivist slogans, from the early years of the People's Republic of China, such as 'men should smoke from the same pack', prompted the offering and sharing of individual cigarettes. This became popular following the 1949 Communist victory, when cigarettes were part of the rations issued to family units, leading to an expansion of male smoking and sharing as an expression of solidarity (Kohrman 2007).

Sharing, largely a male practice, is most widely practised in rural areas (see Sect. 5.3.2) (Wang et al. 2014b), and has been important in developing and maintaining social relationships, particularly during 'tough times' (Hu et al. 2012). During the Cultural Revolution (1966–1976), 'gifting' (i.e. giving packets of cartons of cigarettes, sometimes extravagantly presented) became popular, particularly during festivals and holiday periods, as expensive cigarettes were used as methods of facilitating access to scarce goods and services or avoiding persecution (Rich and Xiao 2012).

The sharing and gifting of cigarettes has also been important in urban China, but, in contrast to rural areas, the primary goal of cigarette sharing was the formation of business relationships (Wank 2000). Perhaps two main factors were important here. First, China's market reforms created a new competitive economic environment in which the gifting of premium brand cigarettes became more important in business and social interactions (Rich and Xiao 2012). This practice was stimulated by

market processes such as premiumisation (see Chap. 4), with the production of higher priced and higher-quality cigarettes, meaning that coveted brands, some costing more than 1000 Yuan (China Daily 2017), served as important status symbols. Luxurious gifts for public officials or medical practitioners, gatekeepers to health services, became commonplace, leading to an anti-corruption drive in 2012. Prior to this, smoking was integral to Communist Party membership. As Pan (2004, p. 314) writes:

Communist Party members, permanent employees and state-owned enterprise employees tend to be more likely to smoke because they are more heavily influenced by the traditional culture of building and using connections than others in the transitional economy. Connections are much more important for these people because most of the benefits they receive, including housing benefits, are obtained through the influence of their connections within their work units ... Chinese live in a web of social relations that often determine the attainment and allocation of various resources

Second, during the 1980s and 1990s, the ritualised gifting of cigarettes was appropriated by domestic and foreign tobacco companies who promoted the gifting of culturally tailored packages especially during important holidays and festivals such as Chinese New Year (Chu et al. 2011; Ding and Hovell 2012; Rich et al. 2014). These trends resulted in both sharing and gifting becoming ubiquitous across China. The few studies that have examined correlates of gifting in urban settings suggest that, in accord with expectations, gift givers are younger, more affluent and more highly educated and work in private companies or in sales and management positions. Gifts are mainly given to friends and colleagues (61%), bosses and supervisors (14%), business partners (13%) and family members (10%) (Ark Marketing Research and Consulting 2002). A study conducted in six major cities in 2007–2008, of smokers *receiving* cigarette gifts, showed that they were more likely to be female and older, have higher educational attainment and live in Beijing and the people who smoked fewer cigarettes per day (Huang et al. 2012).

Overall the evidence suggests that the cultural practice of cigarette sharing and gifting has been modified by urbanisation and social change. It also appears to have become less common as such cultural practices have increasingly been modified by tobacco control messages, particularly in larger cities. Although the evidence is sparse, there is some indication that both sharing and gifting have declined in larger cities, such as Beijing and Guangzhou (Hu et al. 2012), as well as in some eastern provinces. Xu et al. (2016) found that both sharing and gifting declined in smokefree households in Zhejiang Province between 2010 and 2012. In households which are not smoke-free, gifting (but not sharing) also became less common.

5.2.3.3 Self-Exempting Beliefs

That tobacco smoking causes a variety of morbidities is well known to a majority of citizens in a highly literate society like China (Xu et al. 2013b; Zheng et al. 2013; Cheng et al. 2015), although there are limitations in community understanding of the actual harms. First proposed by Festinger (1957), self-exempting beliefs can be

used to explain why people knowingly perpetuate deeds harmful to themselves. Culture, broadly defined, provides a rich reservoir to sustain and reinforce self-exempting beliefs (SEBs) about smoking (Chapman et al. 1993; Oates et al. 2004; Heikkinen et al. 2010). Sociologists such as Swidler (1986) and Di Maggio (2002) have argued that culture consists of an elastic reservoir of cultural beliefs and practices that influence how people of different cultural and political backgrounds consume tobacco and other substances. These perspectives enable us to see how, in circumstances of conflicting behaviour and belief, culture steps in as a repertoire of justification to reinforce a smoker's behaviour.

In China several studies confirm this. Ma's exploratory study (Ma et al. 2008) informs us that the most common self-exempting beliefs about smoking among Chinese males include the importance of cigarettes in social and cultural etiquette. Ma's study suggests that a social norm tied to the high valuation of economic success and social promotion in a patriarchal society could function as direct support for men to maintain smoking behaviour. While concrete beliefs in the legitimacy of tobacco consumption may have varied, they all demonstrated that traditional culture in many cases could provide the fundamental basis of self-exempting beliefs among men in China. Such self-exempting beliefs have been tested through research. In their study of male smokers in Hangzhou, Yang et al. (2014) concluded that while involvement in family, friend and co-worker networks had a direct effect on the likelihood of smoking, SEB, as measured by a standard SEB scale, also had a significant indirect effect, but only in the case of involvement with co-workers. Male smokers, despite reporting positive responses to tobacco policy, also accepted tobacco consumption as a necessary part of social etiquette. Some writers go even further to claim that the importance of smoking for socialisation makes it a unique part of Chinese culture when compared to western countries (Huang et al. 2020, p. 481).

5.2.3.4 Shanghuo as a Self-Exempting Belief

In traditional Chinese medicine (TPM), the concept of *Shanghuo* is one form of self-exempting belief. Literally meaning 'raised fire', *Shanghuo* describes a state of Yin-Yang (hot versus cold) imbalance resulting in an increased susceptibility to disease. This traditional concept has no specific set of physiological symptoms and varies from person to person (He and Kurihara 2008; Pan et al. 2020). The status of *Shanghuo* is said to disrupt the homoeostasis of human body and to be an outcome of stress arising from emotional factors arising from the pace and competitive pressure of modern life.

When a person consumes too many hot items, he/she will suffer from *Shanghuo*, which has to be remedied gradually by consuming more cold things. Thus, even though smoking cigarettes constitutes an activity that elevates much hotness and disrupts the bodily balance of Yin and Yang, traditional beliefs emphasise that the consumption of certain food items, along with tobacco, can rebalance the equilibrium. Alternative Chinese medicine advocates often mention and recommend the

use of *yumcha*, citrus tea fruit, for supposedly purging and discharging toxins from tobacco. Such lay belief, although without much established support from modern medicine, may provide a delusionally safe method of smoking and inadvertently serve as an excuse for continuing smoking.

Such cultural ideas are not unique to China (Huang et al. 2020). Jackson et al. (2004) report similar practices in Kelantan, a rural state in Malaysia. Respondents were asked whether they could do something to make smoking safe. Drinking water and eating sour fruit were frequently mentioned, the latter, for example, being described as 'cleaning' and able to 'scrape out the essence of cigarettes'. Such self-exempting false beliefs were widespread and, like *Shanghuo* in China, point to the need to address such ideas in antismoking campaigns. Self-exempting beliefs have also been reported in western contexts such as Australia. Oates et al. (2004, p. 779) found that they acted as shield particularly for older and less-well-educated smokers who were more likely to view smoking as a risk rather than a probable cause of illness. Almost a third of the respondents believed that eating healthy food and exercising regularly could overcome the harms of smoking.

5.2.3.5 Patriotism and Smoking

Since tobacco production and consumption became important to the Chinese economy, both the tobacco industry and governing bodies, including the Communist Party, have encouraged the identification of smoking with patriotism, a powerful cultural influence on the persistence of smoking. During the early era of cigarette production in the late Oing and Nationalist time, foreign cigarettes dominated the Chinese market (see Chap. 3). However, waves of democratic and patriotic movements, including the famous May 4 Movement (Chen 1970), increasingly demanded citizens to support domestic industries and shun imports. As a result, buying cigarettes became a part of the highly mobilised ambitious movement of 'industrial salvation' (shiye jiuguo). Thus, Chinese smokers were strongly encouraged to smoke locally produced cigarettes, and the government explicitly prioritised regime stability and security over health (Liu 2018). Even in the twenty-first century, those advocating tobacco control were accused of 'betraying China' and being under the influence of 'western ideological thought' and subject to 'the manipulation of foreign investors and transnational tobacco companies' (Yang 2018, p. 69) (see Chap. 7). Redmon et al. (2013) report that international tobacco control advocates have been criticised on the basis that outside investment will 'bring down' Chinese tobacco companies to the advantage of American industry. The cultural proclivity that domestic products should gain a stronger foothold over foreign imports may have a trenchant impact on how tobacco control is variously perceived and implemented in China. The continued strength of the CNTC reflects not only a quest for economic security but also the importance of national pride and a strong reaction to the shameful experience of past economic colonisation.

5.2.3.6 Regional Cultural Influences

At a national level, cultural differences have frequently been emphasised to explain differences in smoking behaviour between Asian and Western societies. Lee et al. (2020), for example, contrast the collective culture of Japan which encourages conformity, to the more individualistic culture of the USA. In China, as in Japan, there are intense social pressures on males to smoke as an expression of polite manners, compared to the USA where such social processes are much less important.

In a vast country like China, of heterogeneous linguistic and racial/ethnic composition, regional cultural practices influencing smoking and other health behaviours will not be uniformly distributed. Reminiscent of the north-south divide in Britain, regional differences in health in China have attracted increased attention. The geographical cutoff between the north and the south is not a trivial matter. In spite of variations between provinces, there are certain regional similarities in the substance use culture across the north and differences with the rest of China also evident for a variety of dietary and health indicators. Chen et al. (2019), for example, showed that, for female cancer deaths, smoking was the leading risk factor in six northern provinces (Heilongjiang, Tianjin, Inner Mongolia, Jilin, Liaoning and Anhui). Other health indicators related to smoking, including age standardised prevalence of stroke, also show distinct north-south variations (Xu et al. 2013b; Ru et al. 2019). Xu et al. (2013a) attributed such variations not to smoking but to the impacts of a higher northern prevalence of hypertension and excess body weight associated with the northern grain-based diet. However, Gao et al. (2017), using a more sensitive age-adjusted life course measure of smoking, showed that the latter was positively associated with the risks of hypertension, risks that increased with age.

While many factors contribute to regional differences in smoking and other forms of substance use, especially in low- and middle-income countries (Grittner et al. 2019), the effect of the cultural context cannot be overlooked. Most Chinese research, however, if it considers culture at all, largely views it as a residual factor in terms of the significance of regional variables in multilevel models. A number of studies have commented on the broad regional divisions in smoking; however, most do not use multilevel modelling strategies which control for other demographic, health and socio-economic factors and urban-rural status. Typical of the latter is Astell-Burt et al. (2018) who found that age-adjusted smoking rates were highest in a belt of north and northwestern provinces, but were also high in the main tobaccogrowing areas of Southern China. Interestingly north-south differences were strongest for females, rather than males, with the prevalence of female smoking being highest in the north and in Tibet (Fig. 5.1).

One of the few multilevel studies is that of Lee et al. (2019). Using the 2011 China Health and Nutrition Survey, they found that smoking prevalence was higher in Northern China, even after accounting for urban-rural differences and a variety of other individual socio-economic and health status indicators. Compared to the Northeast, current smoking prevalence was significantly lower in the East Coastal (OR = 0.78) and Central Regions (OR = 0.72), but no significant difference occurred

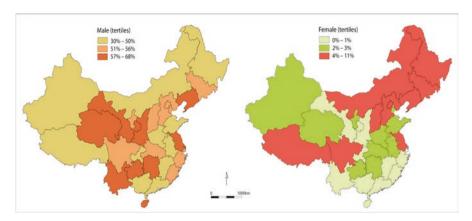


Fig. 5.1 Current smoking by province (2010). (Credit: Modified from Astell-Burt et al. (2018), p. 758. Reproduced courtesy of Oxford University Press (Rightslink Licence No. 4878561188341))

between the Northeast and the Southern Regions (which included Yunnan) or with the megacities. However, as Liao et al. (2017) found, regional distinctions between the Northeast and other regions were not present for levels of consumption (number of cigarettes smoked per day), except for the Southern Region where rates were slightly higher (OR = 1.09). In addition to the presence of regional effects, both current smoking and smoking intensity were also significantly higher in rural areas (urban ORs = 0.83 and 0.93, respectively). Current smokers were also more likely to be older age and of lower social status and were almost three times more likely to be heavier consumers of alcohol. However, other than commenting that the regional 'geographic disparity should be examined further' (Lee et al. 2019, p. 10), there was little discussion of the likely impact of cultural and other factors.

A greater attempt to unravel the influence of cultural factors was made in an earlier study by Li et al. (2015) on regional differences in smoking, drinking and physical activities. Like Lee et al. (2019), they found that smoking prevalence was highest in the Northeast (28.2%) and Northern regions (27.7%) followed closely by the tobacco-growing Southwest (26.3%), with the lowest rates in the East (24.3%), Central-South (24.2%) and Northwest (22.1%). The correlation between smoking and drinking (0.84) was also highest in the Northeast region (Liaoning, Jilin, Heilongjiang and Dalan provinces). The authors speculated that there is a northeastern subculture characterised by 'naturalism, which encourages adventure, eating and drinking freely, and collectivism which stresses hospitality, close social ties, frequent gathering, sharing, and no refusal on drinking/smoking proposals' (Li et al. 2015, p. 236). Anecdotal evidence also suggests that the Northern residents have an infamous reputation of drinking more heavily than people in other regions. The region's colder climate and nomadic tradition were also considered as a possible explanation as was the plains physical environment which was thought to have enabled greater social interaction and regional conformity in historical times.

As north-south cultural differences are a common theme in much of Chinese literature (Xi 2018), clearly more consideration is necessary of these differences and their implications for smoking and health and to guide public health prevention programmes. For instance, the more patriarchal machismo culture of northern and western China, which partly reflects its ethnic mix, can be hypothesised to be an important factor in explaining differences in smoking. Men may use smoking to display their highly valued machismo expression of carefreeness and brotherhood. A clue to the higher rates of smoking of women in the north is provided by Xiao Hong's novel, *Biography of Hulan River*. Xiao notes the harsh natural environment of the north and the importance of the 'fire kang' for rural women, 'victims of a patriarchal society' (p. 1595). The kang is a space for them to meet and where they can release their burdens to each other in their leisure time. Xi (2018, p. 1595) laments, 'they talk about everything here ... tell about the difficulties in life and comfort each other" ... and their suffering as women'.

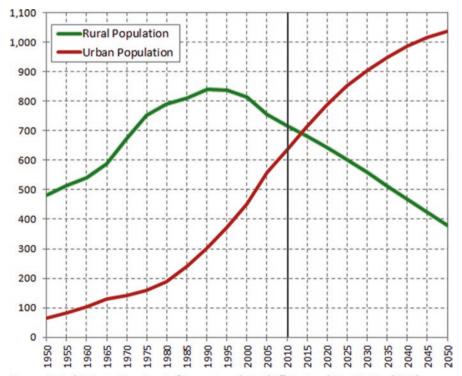
North-south distinctions in China are also part of the popular discourse (Talhelm et al. 2014, 2018). There is a strong view among the Han majority that there is a division between the southern and northern populace (Ma et al. 2016). There are abundant genetic studies indicating that, despite some common elements, Han Chinese from the south and the north have different ancestral origins. Many southern Han may be closer to southern minorities, while many northern Han genetically cluster with Mongolians, Uyghurs and Manchurians (Du et al. 1997). For centuries after the establishment of the Han dynasty, the Chinese South (below the Yangtze River) had been a safe haven for northern royalty when they were driven from their lands by various waves of nomadic nations. From their southern refuge, they fought to reclaim their lands from steppe nomads. In the north there was repeated integration between Han and different nomadic groups of Tungusic, Mongolian and Turkic origin. During the Jurchen and Khitan periods from the ninth to the thirteenth centuries, many Han Chinese along the northern borders defected to, or seasonally migrated between, the nomadic territories and Chinese agrarian society (李月新 2007). A famous satirical poem, Hehuang Yougan, also depicted a picture of Han 'turncoats' in the late Tang dynasty (618–907) along the northwestern border. As Situ Kong wrote: 'war dust rising from Fort Xiaoguan on the Upper Yellow River interrupts the springtime in a foreign land. Han fellows all adopted the barbarian language, and turned to curse their Han folks'. These different cultural origins and practices, including the more recent promotion of regional identities (Oakes 2000), deserve further study for their impact on modern patterns of health behaviour (Kong 2010).

5.3 Cultures of Rural Smoking

Many of the cultural factors discussed previously have their roots in ancient China and in a society that was, until recently, largely rural (Unger 2016). When the PRC was formed in 1949, the urban proportion of the nation's population was only 10.6%

(Quan 1991). Even though this share had doubled to 19.6% by 1961, it soon fell again to 13.4% in 1966 given the restrictions on urban employment imposed by Central Government in the years following the economic disaster of the 'Great Leap Forward'. This demographic concentration changed little in the next 20 years until urban growth increased following the start of Deng Xiaoping's economic modernisation in 1978. Nevertheless, as late as 1990, over 80% of the population were still classified as rural with the urban population not exceeding that of rural areas until 2015 (Fig. 5.2).

Despite the country's massive urbanisation, even today many Chinese people comment that China is still dominated by agrarian mores which include Confucian values of tradition and respect. The presence of rural-urban migration on a massive scale has meant that the rural fabric is still ingrained in Chinese society, symbolised by family reunifications at Chinese New Year and other holidays when many urban dwellers return to their rural roots. These are also important in the history of the Communist Party. The Maoist military strategy of using villages to encircle cities had in buttressing industrialisation in major cities such as Jinan, Zhengzhou and Chongqing, often at the expense of the survival of the peasants. For example,



Source: United Nations, Department of Economic and Social Affairs, Population Division (2010): World Urbanization Prospects, the 2009 Revision. New York

Fig. 5.2 Urbanisation of China's population (m). (Credit: United Nations (2010) Public domain)

Garnaut (2014) showed that during the natural disasters from 1959 to 1961, starvation- and malnutrition-related mortality was highest in rural areas with good infrastructure links to cities, suggesting that, despite official secrecy surrounding relevant data, the peasants from these rural places died because a substantial portion of their crop was likely have been directed to support nearby cities. The historical plight of the countryside, although much improved in recent years, still reflects a variety of health disadvantages, including higher rates of smoking, the causes of which are addressed in Sect. 5.3.2.

5.3.1 Rural Smoking Prevalence

High rural smoking rates reflect the persistence not only of cultural practices discussed previously but also of a rural-urban division that is deeply ingrained in modern Chinese social history. The massive urbanisation of China's population has been accompanied by a widening urban-rural gap in smoking prevalence that appears to have increased in recent years (Zhi et al. 2019). Many studies have shown that the high rates of smoking among rural Chinese men exceed those of urban men (Liu et al. 2017), especially at older ages (Mao and Wu 2007). People from rural areas tend to smoke (and drink) at an earlier age (Liao et al. 2017), are less likely to quit (Liao et al. 2017; Wang et al. 2014a) and have a poorer knowledge of tobacco harms (Xu et al. 2013b; Mao et al. 2014). Both prevalence rates (Yang et al. 2008, 2009) and consumption levels (Cai et al. 2019) are highest among those with the greatest income and household assets, but this social variation is likely to reflect other provincial factors such as health education and the extent to which tobacco control policies have been implemented in rural areas.

5.3.2 Why Smoking Is Higher in the Countryside

The continued high rural smoking rate can be attributed to a number of factors, which together have accentuated structural inequalities and increased the difficulties of quitting among rural smokers.

5.3.2.1 Gender Norms

In China's countryside, the gender norm is particularly traditional and retains a greater number of conventional familial arrangements than in the cities. The very issue of at-risk behaviours associated with the mythical ideas of masculine superiority and feminine submission again floats out of the pretension of patriarchy culture to assist speculation on the causes of smoking. In the countryside, due to slower development and the stable organisation around the division of arable lands into the

hands of family-based productive units, the changes and shuffle of values in social life tend to lag behind the cities. Gender-based norms still dominate all aspects of rural society. Despite lower disposable income, the bride price is infamously high in the countryside and often makes headlines when bridegrooms commit suicide when they cannot 'afford' their beloveds. This is because traditional roles are strongly embedded in these matrimonial unions based on the idea that engaged girls become 'owned property', in stark contrast to the romance-based marriages in urban settings. Men are also expected to show valiant conduct for the proof of their masculine qualities, which includes prioritising nonfamilial relationships over the domestic sphere and treating male friends as more important than their own families. This external-oriented value is observed among men from many cultures of both the West and the East, with the cultural disposition of genders reflecting two structurally distinguished value systems: the domestic and the external (Bourdieu 2001). In such a cultural system, at-risk behaviours are exclusively reserved as the rights and duties of men.

5.3.2.2 Cigarette Sharing and Gifting

As outlined previously, in rural areas an important cultural norm has been the role of cigarette sharing which forms a significant part of community identity (Hu et al. 2012; Wang et al. 2014b). Today both sharing and gifting permeate every aspect of rural family life from economic activities to leisure pastimes both in family and wider social interactions (Fig. 5.3). The extent to which gifting is so ingrained in rural society is evident in Mao et al.'s (2014) ethnographic study of households in a rural area of Central Jiangsu. Mao found that cigarette gifting was particularly important for family juniors who 'were expected to show filial piety to senior generations of family elders' (p. 7). Usually such cigarettes were almost always more expensive brands that were believed to be less harmful to the health of the recipient. Cigarettes also played a role in off-farm economic activities either as a type of payment to business partners or gifts to business customers. Thus, both gifting and sharing were important rituals for establishing and strengthening economic ties. They were also often used as bonus payments by employers to employees, or if local households hired craftsmen, then cigarette gifting would be expected by the latter.

With rural-urban migration, gifting has provided a substantial number of cigarettes to rural smokers, and can be seen as a form of 'remittance' from children in the city to their families back home (Rich et al. 2014). Such gifts are often a major source of cigarettes especially for poorer rural households. Not only do they underwrite the cost of smoking, but also allow limited funds to be devoted to other priorities, or cartons to be regifted or sold (Hu et al. 2012).

The cultural practices of sharing and gifting are so ingrained that it makes quitting very difficult, thus contributing to the higher smoking prevalence in rural areas. As a consequence, the smoking gap between rural and urban areas will probably



Fig. 5.3 A farmer lights up a cigarette for his fellow before himself in Laofen Village, Pingshan, Hebei, 2012. (Credit: Alamy Image ID: D05KG3 Stock photo)

further diverge, with rural smoking rates remaining relatively unchanged compared to the decline that is happening in cities.

5.3.2.3 Poverty and Income Gaps

Poverty and inequality can also affect rural smoking. Traditionally rural China has been characterised by high levels of poverty and disadvantage. In such situations smoking was an important form of relaxation providing relief from the burdens of daily life. However, the economic transition, initiated at the end of the 1970s, led to a dramatic increase in income for Chinese households. Rural income growth led to a considerable reduction in poverty levels: the official rate, based on the new poverty line issued in 2010, declining from 98% in 1978 to 10% in 2013 (Luo et al. 2020). Nevertheless income growth in rural areas lagged behind that of the cities, resulting in a widening gap, at least until 2007 (see Chapter 6). The drop in absolute rural poverty has been driven by economic growth, in part aided by government subsidies for agriculture, cash transfers aimed at lower-income groups and the outmigration of lower-income workers. As of 2014, Luo et al. (2020, p 4) estimated that approximately 70 million rural people still had incomes below the official poverty line. Within rural areas, income inequality also increased, but not at the rate seen in urban settings. Nevertheless, income gaps, which also influence smoking, were more apparent in the period after 1990 than before (Ravillion and Chen 2004).

5.3.2.4 Stress

Stress is a major physiological culprit for smoking (Slopen et al. 2013; Stubbs et al. 2017) and the use of other psychoactive substances including alcohol and betel nut. The bleak fact that China's rural residents suffer a disproportionate number of stressors in their daily life explains partially why the smoking rate is much higher there. As noted above, the standard of living in the countryside and the socioeconomic status of rural residents are substantially lower than in the cities. In 2018, the disposable annual average income of rural residents (¥14,617) was only 37.2% of their urban counterparts (¥39,251). After deducting the cost of living, there is a difference of 5.4 times in the savings gap between urban and rural residents (Xinhua News 2019). This means that rural residents will have little savings in the event of major illness or accidents, for social events such as childbirth, marriage and funeral ceremonies, and for children's educational expenses. Any of these individual events, in conjunction with community factors, such as poor healthcare, are likely to increase stress levels among rural residents, making them vulnerable to health problems (Fu et al. 2018; Yang et al. 2019) and at increased risk of suicide (Zhang and Wang 2012). Using tobacco to elevate euphoria and block the stress response is prevalent among smokers (Twyman et al. 2014) and is one of the key reasons why smoking rates are higher and quit rates lower among rural dwellers.

5.3.2.5 Differential Access to Health Services

The recent restructuring of the Chinese healthcare system has provided another form of stress for rural residents. Until 1978, China was characterised by a health system modelled after the Soviet Union (*Semashko* system). Healthcare was the responsibility of the State, with funding for health services largely from government sources. Before 1978, Chairman Mao Zedong encouraged the masses to learn about medicine and use traditional Chinese medical knowledge to treat themselves. During this time, professional healthcare workers were sent to the countryside in large numbers, partly as a form of political re-education and partly to equip rural healers (barefoot doctors) with some modern medical knowledge (Fang 2012).

However, the 1978 neoliberal economic reforms resulted in an increased commercialisation of the health sector, with tightened hospital budgets, reduced health-care funding and increased patient co-payments (Mullins-Owens 2015). The effects of the reforms were acutely felt in rural China. In the late 1970s, a variety of health-care plans, under the Co-operative Medical System, covered approximately 90% rural citizens (Liu et al. 1999), but by the early 1990s, this had been reduced to approximately 10% (Tang and Bloom 2000). In addition to increased patient co-payments, the decentralisation of fiscal responsibility to provinces and lower levels of government funds accentuated the already uneven distribution of services between urban and rural areas, leading to a withdrawal of many preventive and patient services (Shi 1993). For poorer rural smokers, this resulted in difficulties of

financing care, but also in geographically accessing services, including primary care and smoking cessation support (Lin et al. 2019, p. 7) (see Chap. 8).

The market-oriented reform from 1978 led to a near collapse of healthcare in rural areas because rural co-operative healthcare, based on the collective economy, lost its main source of funding. Since 2003, the New Cooperative Medical System (NCMS), offering three insurance schemes, has been developed, but has been criticised for not increasing access to care (Babiarz et al. 2012), especially among poorer patients who have chosen the least expensive insurance option (Ma et al. 2012). The effect of the reforms leading to problems of social insurance coverage is that urbanrural disparities in health have become increasingly larger with age (Jiang and Wang 2018).

5.3.2.6 Rural Ageing

Urban-rural migration has led to an increasing aged population in rural areas, with significance for smoking, given higher rates among older generations of Chinese (see Chap. 2). Like rural areas everywhere, the urban migration of younger family members has imposed additional burdens upon older Chinese especially since the former one-child policy has meant that the presence of just one offspring has made care of the elderly more difficult (Liu 2014; WHO 2015). Being 'left behind' has been shown to elevate the suicide risk among the rural elderly, through increasing life stresses, depressive symptoms, mental disorder and decreased social support (Zhou et al. 2019). Such trends have been compounded by the restructuring of healthcare services which has restricted both the amount and quality of healthcare support available.

A number of studies have demonstrated significant urban-rural differences in access to and utilisation of healthcare services (Liu et al. 2007). Zhang et al. (2017), for instance, showed that during the period 2005–2014, older adults in rural areas were nearly twice as likely as those in urban areas to report inadequate access to healthcare which, in turn, was associated with higher rates of disability and overall mortality among rural compared with urban dwellers. Controlling for health behaviours, such as smoking, attenuated but did not eliminate the significance of this relationship, suggesting the presence of other rural pathways affecting mortality outcomes.

5.3.2.7 Institutional Causes

In addition to the effects of health services restructuring, higher smoking rates in rural areas can also be attributed to a number of institutional causes. Perhaps chief among these are the effects of the discriminatory *hukou* system in affecting the welfare of rural migrants and their home communities. We address issues associated with rural-urban migration in the next section.

Urban-rural differences in smoking also reflect the differential impact of tobacco control policies on urban and rural areas (see Chaps. 8 and 9). The growth of tobacco control in China has largely been an urban process, with little policy transfer occurring between urban and rural locales. Progress at the provincial level has been slow and uneven with no specific policies aimed at rural areas with higher prevalence rates. The lack of positive intervention by state actors is also true of the health system where, as Wang et al. (2014a) found in Shandong Province, tobacco control activities at villages were rare and infrequent. A lack of knowledge of effective smoking cessation tools was characteristic of both smokers and village doctors, who themselves were likely to be smokers.

5.4 Culture as Institutionalised Discrimination: Rural-Urban Migration and the *Hukou* System

An important part of the Chinese cultural context has been massive rural-to-urban migration and the role of the *hukou* system. Indeed, as Hamnett (2020) has argued, the post-reform pattern of urbanisation in China, and the impact of the locality-based citizenship *hukou* restrictions on urban migrants, makes it unique and sets China apart from other countries. In this final section, we first deal with the scale of rural-urban migration, characteristics of the *hukou* system and its relationship to patterns of smoking among rural-to-urban migrants.

5.4.1 Rural-Urban Migration and Smoking

An important feature of the urban condition has been the enormous growth of internal migration. Rapid urbanisation and industrialisation, especially in cities in eastern China, created a huge demand for additional labour. From 1990 to 2006, it was estimated that the migrant population tripled from 50 million to an estimated 127 million, or approximately 10% of China's total population. In 2019, there were approximately 291 million migrant workers in China; 117 million were local migrant workers, working in the vicinity of their home, 99 million worked at more distant places in their home province, and 75 million had left their province and worked in regions far away (Textor 2020).

Rural-urban migration has had a powerful influence on the health behaviour and health outcomes of urban migrants. A growing number of studies have documented the negative effects of marginalisation and social exclusion on migrant stress (Fu et al. 2007; Luo et al. 2016; Zhong et al. 2016) and on the mental and physical health of urban migrants (e.g. for recent reviews, see Mou et al. 2015; Li and Rose 2017; Bengoa and Rick 2020; Wang 2020). Over the last few decades, a growing literature has also examined the health behaviour implications of rural-urban

migration; only recently have the explicit effects of *hukou* status on smoking and other health outcomes been considered. That seems an afterthought and is strange given the pervasiveness of *hukou* in the Chinese cultural context. With respect to smoking, the results of this work are summarised in Table 5.1. A number of key themes are evident.

First, despite the many disadvantages faced by rural migrants, smoking prevalence among rural-to-urban migrants is commonly reported to be lower than the national prevalence rate. For instance Liu et al. (2016) reported the smoking prevalence for male migrants to be 46.7% in 2010 (lower than the national rate of 52.9%), but for higher female migrants (5.3%), higher than the general female population (2.4%). Similarly Chen et al. (2009) showed that rural migrants were not more likely than others, such as rural dwellers left behind, to engage in health-risk behaviours. Such conclusions, however, need to be tempered by the presence of the healthy migrant effect, the need to control for *hukou* status, the existence of very high stress levels and smoking rates among certain groups of migrants (Cui et al. 2012) and regional environmental factors which have been shown to affect the propensity of migrants to smoke (Xie 2017).

Second, in terms of the predictors of migrant smoking, studies have shown that cigarette smoking among migrants was related to a variety of environmental conditions such as years of migration, number of cities worked in, number of jobs held, type of job, job dissatisfaction and hours worked per day (Chen et al. 2004; Yang et al. 2009; Mou et al. 2013; Liu et al. 2015; Zheng et al. 2018). Cui et al. (2012) reported that migrants with high perceived stress had an excess likelihood of being current smokers; those with high perceived work stress a 75% excess likelihood; and those with a high perceived life stress a 45% excess likelihood.

Third, the effect of environmental factors often varies by gender. For example, employment in temporary construction jobs, with high risks and low benefits, was associated with higher smoking among females than males (Chen et al. 2008); in Shenzhen the absence of a job contract and physically demanding jobs were more important risk factors for smoking among women, whereas longer working hours and less rest were more important for men. Perceived discrimination was particularly important for female restaurant/hotel and commercial sex workers (Shin et al. 2013). Among women, higher rates of depression affected substance use, but the effects varied by income; for higher-income migrants, depression increased the likelihood of smoking, but the reverse was true among female migrants with lower incomes (Chen et al. 2008). This may reflect the social pressures associated with earning higher incomes in different work environments, such as nightclubs, where job-related smoking and drinking were common (Chen et al. 2008).

Fourth, migrant housing and neighbourhood conditions also affected smoking. Chen et al. (2004) found that living in rental properties was associated with an increased likelihood of smoking. Absence from home, family and familiar surroundings and living in overcrowded collective dormitories were also key risk factors (Yang et al. 2009). In Shenzhen, however, Mou et al. (2013) found that workers living in non-dormitory accommodation were more likely to smoke. This partly reflected dormitory smoking bans but also the likelihood of family accompaniment

 Table 5.1 Recent studies of cigarette smoking among migrant populations in China

| Study | Data | Location | Current/daily smoking rate (%) | Key findings |
|-----------------------|---------------------------------------------------------------------------------|-------------------------|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chen et al. (2004) | MHBS 2002 | Beijing | Total M 51.7 F 10.9 High income M 62.4 F 19.8 | Smoking levels associated with age, income, migration years, number of cities worked in, number of jobs held and living in rental properties, job dissatisfaction & hours worked per day. Female migrants in particular were at an elevated risk of smoking the greater the number of cities they had worked in; male smoking prevalence increased from 48.1 to 67.2% (1–5 cities) vs 9.5%–31.65% for females |
| Hesketh et al. (2007) | Work unit survey 2004 | Hangzhou | Total M 54.0 F 1.8 | Compared to urban workers (M 58%, F 2%), migrant workers smoked less. Migrants took up smoking later, were less likely to become heavy smokers and were more likely to want to quit |
| Chen et al. (2008) | MHBS 2002 | Beijing, Nanjing | Total M 56.5 F 10.5 | Workplace, income and depression are associated with substance use (smoking, drinking and drugs), but effects were not constant by gender, e.g. construction jobs were associated with more substance use among females Depression affected substance use, but the effects varied by income; for higher-income female migrants, depression increased the likelihood of smoking, but the reverse was true among lowincome female migrants |
| Chen et al. (2009) | Three samples: Urban residents, rural migrants, rural residents 2004–2005 | Beijing, 8 provinces | Urban residents M 70.2 F 20.8 Urban migrants M 66.9 F 11.6 | Compared to urban and rural residents, both migrant men smoked less. Migrant women smoked less than urban women but more than rural women. Similar patterns were evident for alcohol consumption |

(continued)

Table 5.1 (continued)

| Study | Data | Location | Current/daily smoking rate (%) | Key findings |
|--------------------------|-------------------------------------------------------------------------------|----------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Yang et al. (2009) | Migrant workplace surveys | Chengdu, Shanghai, Beijing | Pre-migration M 29.2 F 1.0 Post-migration M 44.4 F 1.3 | Smoking prevalence increased following migration, with the number of cities of migration, higher personal income and housing type (highest in collective dormitories). Smoking initiation was related to the number of cities of migration and higher personal income |
| Finch et al. (2010) | Migrant women working in restaurants & commercial sex venues | Beijing | Restaurant workers 6.5 Sex workers 33.3 | Current smoking rates were high compared to rates in the general population. Compared to non-smokers current smoking rates were related to education (protective) and job satisfaction. Exposure to female-branded cigarettes increased the risk of ever smoking |
| Wan et al. (2011) | Migrant women working in restaurants/ hotels & sex venues 2010 | 10 provincial capitals | Restaurant/ hotel workers 3.2 Sex workers 41.9 | Those who initiated smoking after moving to the city were more likely to be current smokers than those who first tried before migration Exposure to female cigarette brands increased susceptibility to smoking Older age and higher education were negatively associated with having first tried smoking after migration |
| Cui et al. (2012) | Migrant workplace surveys | Hangzhou, Guangzhou | Overall 64.9 Age 40+ 74.3 Low educ 75.3 High stress Work 71.7 Life 71.0 | Migrants with high perceived work stress had a 75% excess likelihood to be current smokers, while those with a high perceived life stress had a likelihood of 45% |

(continued)

Table 5.1 (continued)

| Study | Data | Location | Current/daily smoking rate (%) | Key findings |
|---------------------------|-------------------------------------------------------------------------------|-------------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mou et al. (2013) | Migrant factory workers 2008 | Shenzhen | Daily smoking M 27.3 F 0.7 | Prevalence rates significantly lower than national smoking rates Higher rates of male smoking associated with longer working hours, less rest & frequent alcohol consumption For women the key risk factors were absence of a job contract, physically demanding jobs, frequent internet use & alcohol consumption Accumulated working time in Shenzhen as did accommodation type also had an impact |
| Shin et al. (2013) | Migrant women working in restaurants/ hotels & sex venues 2010 | 10 Chinese cities | Restaurant/ hotel workers 3.2 Sex workers 41.9 | Perceived discrimination was independently associated with current an ever smoking for both groups City smoking level increased the probability of smoking for both groups of workers as did life satisfaction Higher monthly income increased the probability for sex workers |
| Wang et al. (2014b) | Qualitative study of 39 male migrants 2013 | Shanghai | 54.8 | Smokers were aware of the health risks of smoking but considered it to be an important part of their identity and social participation as did consuming more expensive cigarettes. Smoking was also seen as a way of relieving psychologica stress caused by discrimination |
| Liu et al. (2015) | Migrant survey 2012 | Shanghai | M 45.0 F 2.0 | Among males current smoking was higher among those who worked in construction & entertainment, who were divorced/widowed and who had poorer mental health. A longer duration of migration and number of migratory cities lived in were also important Among females current smoking was higher for construction, hotel/restaurant & entertainment workers, higher monthly income, those in poorer health & number of migratory cities lived in |

(continued)

Table 5.1 (continued)

| Study | Data | Location | Current/daily smoking rate (%) | Key findings |
|-------------------------------------|--------------------------------------------------|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Xie (2017) | RUMiC Survey 2008–2009 | 15 cities | M 53.2 F 3.2 | The effect of mental stress on the likelihood of smoking depended on regional context, being most evident in eastern China |
| Zheng et al. (2018) | MDMS 2013 | 12 provinces | M 54.4% F 3.7% | Among males years of education and duration of stay affected smoking; among females household registration status and marital status had the most impact |
| Hou et al. (2018) | CHARLS 2011–2012 Persons aged 45 & over | China samples of migrants & nonmigrants | Ever smoking: Nonmigrants R 40, U 34 Migrants R to U 33 U to U 28 Rural return 63 Urban return 58 | Strong association between smoking behaviours and migration status in later life: Compared with nonmigrants, migrants who have returned to their place of origin have the greatest % people who have ever smoked and the lowest % of smokers who have quit Migrants who have not returned had the lowest % ever smokers and the highest % quit |
| Song and Smith (2019) | CHARLS 2015 | China urban & rural samples by hukou status | Range of health outcomes | Rural hukouers in rural areas experienced the greatest level of hardships In urban spaces migrants who were hukou converters have better health behaviours than urban migrants with rural hukou |
| Bengoa and Rick (2020) | RUMiC survey 2008–2009 | China urban & rural samples by hukou status | Migrants with rural hukou 27.6; urban hukou 20.3 | Migrants with urban <i>hukou</i> maintain lower levels of blood pressure & are less likely to develop hypertension or obesity than rural <i>hukou</i> migrants. These differences persist after controlling for SES factors such as smoking |
| Zhang and Churchill (2020) | China Family Panel Studies 2012–2016 | China 635 communities | Social Well-being | The effects of income inequality on social Well-being are stronger for rural <i>hukou</i> residents compared to urban <i>hukou</i> |

CHARLS China Health and Retirement Longitudinal Study, MDMS Migrant Dynamics Monitoring Survey, MHBS Migrant Health Behaviour Survey, RUMiC Longitudinal Survey on Rural Urban Migration, R rural, U urban

which decreased the risk of depression and provided a network where males could smoke socially.

Fifth, there were few qualitative studies which explored migrant knowledge of the risks of smoking and the ways in which smoking was a reaction to perceived discrimination, stigma and social marginalisation. Wang et al. (2014b) were one of the few studies that examined smoking as a component of the identity of the floating population and reported how cigarette sharing was important in establishing social relationships in new group situations. Despite the economic costs, buying expensive brands was seen as an important part of maintaining a desirable personal image and personal contacts.

Finally, while many studies have examined relationships between mental stress and health outcomes, Xie (2017) has shown that in the case of tobacco use, this relationship is moderated by regional differences. Migrants from the eastern area of China when under high mental stress were more likely to smoke, but this was not true of migrants from central or western China. In central China length of migration appeared to be the key factor, but for western China neither variable was significant. Xie (2017) hypothesised that different factors associated with the host society, such as smoking prevalence, attitudes towards and social support for migrants and the presence of local tobacco control policies, affected the extent to which mental stress was a significant determinant of tobacco use.

5.4.2 Migration and the Hukou System

Migrants have faced a significant institutional barrier, the *hukou* system, which has prevented their political and social integration into the cities to which they moved. The *hukou*, as a strategic element of Chinese urban development, creates risks for worsening health disparities, including smoking. The *hukou* has become entrenched in the institutional and social structure of Chinese society; it affects occupational and employment rights, healthcare eligibility, birthright and the place of burial. It is a strategic cause of health inequalities and reflects deliberate agency external to the affected individuals.

The *hukou* system originated in 1958, during the Maoist era. Modelled on the Soviet *propiska* internal passport system, it was designed to limit the growth of large cities and the demands placed on them, but nevertheless serve state needs for massive industrialisation. Most Asian societies, once under the influence of Confucianism, have practised some sort of *hukou*. However, as Chan and Buckingham (2008) have noted, the Chinese *hukou* system differs substantially from other Asian systems of household registration. By contrast, the main goal of the Chinese system has always been to regulate population mobility while at the same time producing enough cheap labour for industrial enterprises and minimising the burden on state welfare agencies. Within Asia only Vietnam's *hokhau* system that manages mobility is similar to China's model, as is Korea's former system of

hojuje (戶主制), which ceased in South Korea in 2008, but still survives in North Korea.

Subsequent reforms in the late 1990s enabled the conversion of rural-to-urban *hukou* under certain conditions. However, from its inception rural-to-urban status conversion has been very selective with education, party membership and military experience being the three major factors facilitating *hukou* mobility (Wu and Treiman 2007). While the *hukou* system has been relaxed since the late 1970s, since the 1990s it has also been decentralised to local governments giving them greater autonomy to experiment with *hukou* reforms (Song and Smith 2019). Since one of the initial goals of *hukou* was to control the growth of urban populations, this has meant that larger cities most attractive to urban migrants also often have the strictest *hukou* policies (Colas and Ge 2019).

Even today, lacking a local *hukou* means a person from the countryside or another city may not buy houses or cars or have access to health insurance and unemployment and retirement benefits. People need employers or first-degree relatives (including spouses) to sponsor *hukou* conversion. Although purchasing urban properties to acquire *hukou* is possible for rural migrants, in most cities the purchase itself requires a local *hukou*. In megacities, such as Beijing and Shanghai, getting *hukou* for non-locals is only viable through employment in public institutes with sufficient *hukou* quota, marriage or investments exceeding one million Yuan per year in tax contribution. Consequently the *hukou* system has contributed to feelings of deprivation especially among the unskilled who are more likely to suffer economically as a result of being unable, compared to skilled workers, to obtain a local urban *hukou* (Qiu and Zhao 2019).

5.4.3 Hukou Status and Smoking

Results of research to date point to the negative effects of hukou on health behaviours such as smoking and drinking. By restricting the movement of migrants and eligibility for housing and healthcare, the ease of management for legislators has helped create an environment that facilitates risk-taking behaviours. Bengoa and Rick (2020), for example, showed that *hukou* status affected migrant smoking; urban migrants with rural *hukou* recorded higher rates (27.6%) of smoking than permanent urban dwellers with urban *hukou* (20.3%). In terms of ever smoking, the highest prevalence (63%) and lowest quit rates for older people (aged 45 years and over) were recorded for rural return migrants, perhaps reflecting the burdens of living and working in urban areas without the benefits of an urban *hukou*. Few studies, however, have examined the effect of residence and *hukou* status on smoking and other health behaviours. The main exception is Song and Smith (2019) who found that in urban spaces, migrants who were able to convert their *hukou* from a rural to urban status had better health behaviours, including smoking, than urban migrants

who continued to have a rural *hukou*. Bengoa and Rick (2020) found similar patterns with respect to hypertension and obesity.

More work needs to be undertaken on the effects of *hukou* status on smoking and wider health outcomes. Not all migrants wish to obtain urban hukou and opt to straddle and between city and countryside. Despite evidence which shows that receiving an urban hukou substantially enhances subjective well-being (Tani 2017), many migrants see increased benefits from retaining their rural hukou including farming and housing land and more relaxed birth control. Indeed Wang and Schwart (2018) present evidence of increased hukou intermarriage, particularly between urban men and rural women, suggesting the potential childbearing benefits of retaining a rural hukou on the part of one partner. Other factors such as those relating to rural sending areas and migrant integration into the city (Tyner and Ren 2016) and the links to stress and smoking also deserve increased attention. Currently, a considerable portion of Chinese rural-urban migrants have already formed meaningful subcultures within their social world, often through strong native-place networks and hometown identities. The concentration of migrants in occupations and living spaces based on such networks has been found in previous studies to be associated with at-risk health behaviours (Yang et al. 2016; Yang and Yang 2019). In the social world of rural-urban men with the same place origins, they share cigarettes to enforce solidarity, as well as smoking to boost a sense of masculinity in the face of discrimination and belittlement from urban people. Even for Chinese females who rarely smoke, except for the very old generation born before 1949, migration experience increases the female smoking rate, which rises from 9.5% to 15% after 5 years of stay in the city (Chen et al. 2004).

5.5 Conclusions

In any society cultural factors are important for understanding health behaviour and health outcomes, and this is certainly true of China, where a cluster of cultural practices have influenced smoking. Unravelling these, however, presents many challenges; culture is often hard to define, and it is difficult to separate its influence from that of other factors. Although cultural practices are not easily quantified, there is sufficient evidence in China that they continue to be important in influencing smoking and health.

Culture is expressed in many ways and is affected by a variety of structural factors. Within the Chinese context, there are a number of important connections between economic, social and political factors and different forms of cultural expression that have affected smoking (Table 5.2). While not exhaustive, such linkages point to the need to clearly link cultural elements to wider forms of structural change and to distinguish both their temporal and spatial impacts. In terms of the three elements, economic, social and political, the effect of economic changes has perhaps been the most recent. As pointed out in Chap. 3, the CNTC has increasingly commodified cultural emblems as part of its marketing strategies. Similarly the

| Structural factors | Cultural expression |
|--------------------|-------------------------------------------------------|
| Economic | Commodification, hukou |
| Social | Patriarchy, sharing & gifting, self-exempting beliefs |
| Political | Authoritarianism, patriotism, hukou |

Table 5.2 Relationship between structural and cultural factors influencing smoking

implementation of *hukou* policy in 1958, while not exclusively Chinese, was largely introduced for economic reasons and become an important cause of higher smoking rates among certain migrant populations. Because of its authoritarian bias, somewhat relaxed in recent years, *hukou* can also be seen as a political expression of elements of Confucian culture.

Social changes have also influenced culture. Although the effects of patriarchy remain strong, these have been weakened as a result of urbanisation and greater freedom among women (see Chap. 6). Cigarette sharing and gifting too, while being more important in rural areas, has been transformed by urbanisation with gifting becoming more important in urban social interactions. Given the importance of social interactions as a route to urban social mobility, self-exempting beliefs have also been perpetuated as an important part of traditional Confucian culture, emphasising politeness and respect. Finally political factors have had a role to play, not just in the imposition of *hukou* policies but in the early emphasis on patriotism in encouraging smoking.

As implied above, cultural factors also have a temporal and spatial expression. Confucian culture itself has varied in its importance over time. It arose during a period of social disorder in China and was later subsumed as a result of modernisation processes in the late nineteenth and early twentieth centuries during which time cultural restraints on female smoking were partly relaxed. The rise of the PRC and greater authoritarianism is intimately related to cultural processes such as patriotism and *hukou* both of which helped increase consumption. Likewise in post-reform China, commodification has become a more important element. In a similar way, culture also has a spatial expression, whether this be in the form of rural-urban or regional differences in smoking prevalence between North and South China, or the effect of ethnic factors relating to non-Han minorities in some regions (see Chap. 2).

Taken together the above comments suggest that cultural influences can be seen as outcomes of different forms of structural change. This has been a familiar theme in western research on 'cultures of poverty', factors influencing their perpetuation and impacts on health (Wilson 1997, 2009; Small et al. 2010). As was evident then, and now in China, the challenge is to gain a greater understanding on why different cultures arise and the extent to which they continue to influence smoking and other health and social behaviours.

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