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Chapter 5

Slum women's experience of non-communicable diseases and their risk factors: prevalence and responses

Abstract

Women living in slums face the challenges of non-communicable diseases (NCDs) and their risk factors in negotiating slum conditions. Women play a pivotal role in community health as they both suffer disease and make significant contributions to providing care. The limited knowledge on the impact of NCDs on slum women has led to policies and programmes to address their health needs that fail to take into account the gender-related social and contextual demands in this setting.

Our study looked into the prevalence of NCDs and their risk factors in slums in Chennai, India, as well as exploring how these affect slum women. We used mixed methods in the collection of data. The WHO's STEPwise approach to surveillance survey (N=425) yielded information about the prevalence of NCDs and their risk factors in slums, and the qualitative interviews (in-depth = 3; group = 10) provided insights into the perceptions of slum women regarding NCDs, their risk factors and the management of their health.

The prevalence data showed that 58.7% of the women had one or two risk factors while 33.3% had three or more risk factors; 59.7% were overweight or obese, 40.7% were pre-hypertensive or hypertensive and 98% had moderate to high waist-hip ratio. We also observed a high prevalence of unhealthy diets (74%), yet physical inactivity was relatively low at 32.5%. Their alcohol consumption and smoking were both negligible. The interviews showed that slum women were highly aware of NCDs and their risk factors, which manifested in two ways: emotions and knowledge. The qualitative findings also suggest a strong interplay in the lives of slum women between the limiting sociocultural and gender-related conditions endemic to slums and the deficient public health services in relation to NCDs. Finally, in all group interviews women shared examples of the actions they had taken in response to their NCDs and in the absence of acceptable care in public health facilities. These responses were understood as coping strategies that served their health-related needs, through actions such as personal care, health

information and advice. They provide an accessible and responsive care service to women slum dwellers, which could be strengthened to the benefit of communal health.

5.1 Introduction

Women play a pivotal role in community health since they both suffer disease and make significant contributions to providing care (Langer et al., 2015). This role is undervalued, however, in the current body of knowledge on women's health and the gap with women's actual health concerns (Inhorn & Whittle 2001; Raymond et al., 2005). There has been an extensive examination of women's reproductive and sexual health problems (Kjerulff et al., 2007; Ribiero et al., 2008), yet little research on the prevalence and impact of non-communicable diseases (NCDs) and their risk factors in women (Stroope, 2015). This is particularly true in slums.

Slums are characterised by high concentrations of people living in poverty (Chant 2013), environmental degradation (WHO 2010), poor housing (Sverdlik 2011), and human squalor (UN-Habitat 2003). A large number of women have limited mobility in slums because they are homemakers (Pawar et al., 2008), which can compound the risks of NCDs owing to their greater exposure to air pollution, allergens, wall damp, and smoke inhalation where indoor wood fires are used for cooking (Brashier et al., 2012). Given their poor housing conditions, women attempt to navigate the limited access to healthy food and clean water (Doshi 2013) while often remaining unprotected from severe geophysical or environmental dangers (Joshi et al., 2011).

Women in slums are at a greater risk than men of being in poor physical or mental health (Sakdapolrak et al., 2013). Female slum populations have a reported higher prevalence of overweight and obesity (Anand et al., 2007; Thakur et al., 2016), as well as hypertension and diabetes (Thakur et al., 2016; Bhojani et al., 2013). Added to this, the prevalence of hypertension and diabetes among women in Indian slums is observed to be increasing compared with other sections of the population (Banerjee, Mukeherjee & Baus 2016). In a comparison of working and non-working women in Indian slums, Menjrekar et al. (2014) associated lower education, socioeconomic status and access to information with a higher risk of developing NCDs. Women in slums also fail to make full use of health services, which exacerbates their NCD risk morbidity (Ergler et al., 2011). Women are dissuaded from using government health services due to the high costs of treatment (Subbraman et al., 2012) coupled with a lack of decision-making power with regard to their health (Mandelbaum 1993). The humiliation some slum women experience at the hands of health professionals compounds this problem (Goli et al., 2011).

Slum women face sociocultural demands associated with their gender (Marmot 2006). Studies have concluded that being a poorly educated woman with low socioeconomic status in urban India increases the chances of developing NCDs, and a higher prevalence of risk factors such as domestic violence and minimal possibilities for personal development (Nussbaum 2001; Chodankar 2004) that contribute to this. The socioeconomic constraints of slums combined with these cultural expectations drive the growing burden of NCDs among women

(Chongsuvivatwong et al., 2011). Unfortunately, existing policies and programmes aimed at addressing both slum health in general and women's health in particular are failing to take account of the social and contextual demands associated with gender. Part of this stems from the medical and demographic data used in policy or programme development, which is unable to accurately capture these determinants woven into slum women's lives (Agarwal & Sangar 2005).

In India, the increasing burden of NCDs and slum settlements, alongside a continued prevalence of infectious diseases, is overloading the country's health infrastructure (Subbaraman et al., 2012). This inadequate provision of health care has significantly contributed to the observed increases in NCD mortality and morbidity in the country (Ghosh & Mondal 2011). As yet, the nascent research on NCDs and slums has paid little attention to the contextual and social factors that contribute to the development of disease, particularly in women. Understanding the causal pathways of diseases requires a holistic approach that acknowledges its physical, psychological and behavioural determinants: the aforementioned policy failures in relation to slum women have missed the reciprocal influence of context and gender on risk factors. This study is an attempt to bridge this gap and understand NCD risk factors experienced by women living in the slums of Chennai by measuring the prevalence of risk factors and a qualitative investigation into the coping mechanisms adopted by slum women. The empirical data generated may be useful to decision makers as it seeks to disaggregate the determinants of NCDs in slums, taking account of the different lived experiences created by gendered roles.

5.2 Methods

5.2.1 Study Design

The mixed-methods research employed a convergent parallel design. Quantitative data were collected to estimate behavioural and physical NCD risk-factor associations with sociodemographic variables, and qualitative data were collected to understand slum women's experiences of NCDs, the impact they have and how women have attempted to manage NCDs and their risk factors. The different types of data collected were intended to triangulate findings through wider coverage of the issue (Cresswell & Clark 2007) and to produce an in-depth perspective on the relations between NCDs, their risk factors and the lives of women in slums.

The study protocol received ethical approval from the Institutional Review Board of The Balm Institute in Tamil Nadu, India. Community leaders were first informed about the research, and data collection only started after they gave their approval. The purpose of the research and the procedures of the survey questionnaires, in-depth and group interviews were all verbally explained to participants. Due to the low educational level of participants, verbal consent was

solicited. Likewise, interviewees were informed that they were free to end the interview at any time and could refuse to answer questions if they felt uncomfortable. To maintain confidentiality, interviews were held at a time and place convenient to the participants. No identifying information was collected.

5.2.2 Quantitative Data Collection

5.2.2.1 Setting and Participants

A cross-sectional field study was conducted in the slum communities in Chennai in the Indian state of Tamil Nadu. Women were asked to participate if they had been staying in the community for at least three years and were aged 18 years and over at the time of data collection. The WHO STEPwise approach to surveillance (STEPS) survey questionnaire was used to collect data on sociodemography health behaviour, self-reported illness and health literacy of participants. The STEPS survey was developed in 2000 to improve data collection on NCD risk factors in low- and middle-income countries (LMICs) (Armstrong & Bonita 2003; WHO 2005) and has been validated in many contexts (Guthold et al., 2011). Two field workers fluent in Tamil, the slum community's language, were trained to use the instruments and collect data, following which 20 households were surveyed to pilot test the questionnaire. The first author and two field workers then began conducting face-to-face surveys in the slum communities. Households were visited systematically by soliciting successively all the residents of a particular 'street' of the slum on a given day. In total, 425 female respondents participated in the survey between 10 November 2014 and 20 February 2015.

5.2.2.2 Studied Variables

Sociodemographic Variables

One of the sociodemographic characteristics surveyed in the STEPS questionnaire is annual household income. This was aggregated into a measure of poverty which could take two values: poor and low- or middle-income. This provides a rather crude measure of poverty: Deaton and Drèze (2002) asserted that poverty in India should be understood alongside education, nutrition and crime levels, while Patnaik cautioned against the use of official poverty lines as it was found that a rise in nutritional standards was behind recent declines in poverty in India. Mehta and Bhide (2011) called for the use of measurements not just on the consumption basket but also the geography, sociology, dimension and duration of poverty. Recognising the multifaceted complexity of poverty in India and the methodological difficulty of measuring it,

the World Bank's international poverty line (US\$ 1.25/day) at the time was used. Preliminary research found that, on average, households comprised four income-generating residents. In this study, the category 'poor' thus corresponds to a household income of 85,000 Indian Rupees (INR) per year (~US\$ 1327 per year) to 120,000 INR (~US\$ 1328 – 1874), and low- or middle-income to household incomes of at least 120,000 INR.

Other sociodemographic variables collected by the STEPS survey that were modified include: marital status (single/widowed or married or with a partner), level of education (no formal education, less than or part of high school, or completed high school), ethnicity (Tamil or other), and employment status of the interviewed residents (employed or unemployed) at the date of enrolment. Unmodified variables reported in the analysis include age in years as reported at the date of enrolment, and the number of persons living in the household.

Behavioural Variables

Individuals who are overweight or obese, have a history of binge drinking, tobacco smoking, physical inactivity, or who have unhealthy diet are recognised to be at a higher risk of developing NCDs (WHO & Food and Agriculture Organization of the United Nations 2003). In this study, the following NCD risk factors were explored: tobacco consumption, alcohol intake, physical inactivity, and diet. These risk factors were measured using the STEPS survey and re-coded for the analysis as follows: tobacco users were classified as former/current users, or never users; alcohol intake was considered by distinguishing non-users (0 standard drinks/day), or moderate/binge (>3 standard drinks/day). Although there was some variation in the community, the concept of a standard drink used here equates to 0.5l of beer. Physical inactivity was defined as less than 25 minutes of vigorous activity three times per week (≤ 75 mins/week) or as less than an hour of moderate activity five times per week (≤ 300 mins/week). Participants who met neither of these thresholds were considered to be physically inactive. Nutritional data were also recorded. India's National Institute of Nutrition (2011) recommends ≥ 400 grams of fruit and vegetables every day or an average of five servings per day. Although most people in Chennai are vegetarian, these thresholds of consumption were used to identify participants at risk because of an unhealthy diet.

Physical Variables

An additional module (Step 2) of the STEPS survey was used to perform physical assessments of participants. Heart rate and blood pressure measurements were taken using Omron HEM 7124. Two blood pressure measurements were taken across a 15-minute interval. Weight was measured using Omron HN 286. The weight scale was placed on an even and horizontal surface,

and participants were asked to remove their slippers. Waist and hip measurements were also taken using a standard tape measure. According to India's National Institute of Nutrition (2011), participants with a body-mass index (BMI) equal to or greater than 25 are classified as overweight, and obese if their BMI is equal to or higher than 30. Participants whose BMI was below 18 were categorised as underweight. To code for hypertensive risk, two categories were used: normal (105-139/60-89 mmHg)/ and hypertensive ($\geq 140/90$ mmHg) (WHO 2013).

5.2.2.3 Quantitative Data Analysis

The prevalence of NCD risk factors was defined using descriptive statistics. Chi-square or Wilcoxon (where appropriate) testing was used to establish associations between the NCD risk factors tobacco use, alcohol consumption, physical activity, diet, BMI, heart rate, waist-hip ratio and hypertension and the sociodemographic variables of age, education, income, and marital status. The results were also used to compare the differences between women with a high risk of developing an NCD (three or more risk factors) and women with a low risk (up to two risk factors). A p-value of <0.05 was considered statistically significant.

5.2.3 Qualitative Data Collection

5.2.3.1 Interview design

Interviews were guided by the circle-in approach, where general notions identified during data analysis were refined over time through the personal experiences of interviewees and their interpretations (Guba & Lincoln 1994). For example, starting with how participants view their health, illness, and treatment, they were subsequently asked to describe their experiences of health and illness. Following this, they were asked about their experiences of NCDs, the difficulties they have encountered with NCDs and their risk factors, and how they have sought to manage these. Finally, participants were asked for suggestions about what could be done to counter NCDs and their risk factors in the community. Amendments were made to the interview guide based on the preliminary analysis of an initial interview.

An explorative in-depth interview was held with three women to gain preliminary insights into residents' experiences of NCDs. One of the participants had been living in the community for more than 45 years, and the other two were born in and had lived there for more than 25 years. These interviewees were asked to participate given their length of residence in the community and their willingness to share their insights.

Following this preliminary data collection, a total of ten group interviews were held in the community between April and May 2014 and November 2014 and February 2015. Each group interview comprised four to five participants with ages ranging from 18 to 65 years. The groups comprised married, widowed, and unmarried women. Some of the participants were recommended by the community leaders, but most voluntarily approached the researchers for interview. One group, however, was purposively sampled to represent single young women living in the slums. The sessions lasted between one to two hours and were conducted in Tamil by a member of the research team. All interviews were recorded with participants' consent.

5.2.3.1 Qualitative Data Analysis

The recorded in-depth and group interviews were transcribed and insights were sought into how the experience of NCDs in the slums had affected respondents' lives. Applying a grounded theory approach, we used inductive coding to cluster the statements of the informants into thematic labels, and these were refined iteratively over the course of the interviews. Three main themes emerged during the coding process: awareness, problems, and action. The thematic cluster focusing on problems was also disaggregated into two dimensions: individual and institutional. Interviews were stopped once saturation of the data was reached. Member checking was used to check the robustness of the coding.

5.3 Results

5.3.1 Results of the STEPS survey

A total of 425 women, all having lived in the slum community for more than five years, participated in the survey: 72% were aged 18 to 49 years, 74.5% were married, 52% were homemakers and 80.1% had either no formal education or up to secondary education. Finally, 72.8% of the women were living below the poverty line (see Table 1).

Table 1. General characteristics of the study population (N=425) versus urban Chennai

Variables	Categories	Frequencies	Chennai
Age	18 – 33	135 (31.8%)	29.26%*
	34 – 49	167 (39.4%)	20.73%*
	50+	122 (28.8%)	17.22%*
Marital Status	Single	42 (10.2%)	25.5%**
	Married/In relationship	298 (72.3%)	74.5%**
	Widowed	72 (17.5%)	
Work Status	Salaried	17 (4.1%)	
	Self-employed	157 (38.3%)	
	Homemaker/Unemployed	236 (57.6%)	80.61%***
Education level	No Formal Education	114 (27%)	
	Primary – Secondary	226 (53.4%)	86.64%***
	Completed High School +	83 (19.6%)	
Income	Below Poverty Line	176 (72.7%)	
	Poor	60 (24.8%)	
	Low–Middle Income	6 (2.5%)	
Ethnicity	Tamil	390 (92.2%)	
	Others	33 (7.8%)	
# Family Members	≤ 4	231 (60%)	
	≥ 5	154 (0%)	

*Chennai Metropolitan Development Authority (n.d.)

**Arumugam et al. (2014)

***Directorate of Census Operations Tamil Nadu (2011)

Among the behavioural risks associated with NCDs (Table 2), 74% and 32.5% of the participants were identified having an unhealthy diet and being physical inactive, respectively. Tobacco (either cigarettes or smokeless alternatives) and alcohol intake were found to have negligible levels of use by women.

Table 2: Behavioural risks factors of the women in slums

Variable	Behavioural Risk Factors		Chennai (India)*
	Categories	Percentage	
Tobacco smoking	Never	415 (97.9%)	
	Current	9 (2.1%)	0*

Smokeless tobacco			
	Never	361 (84.9%)	
	Former	17 (4.0%)	
	Current	47 (11.1%)	0*
Alcohol Consumption			
	Never	421 (99.1%)	
	Moderate	1 (.2%)	
	Current	3 (.7%)	6%*
Diet			
	Healthy	110 (26%)	.4%*
	Unhealthy	313 (74%)	
Physical activity			
	Active	287 (67.5%)	23.3%*
	Inactive	138 (32.5%)	

*Oommen et al. (2016)

Regarding the physical risks (see Table 3) the women face, 48.6% of the participants were overweight or obese and 30.5% already had hypertension, while 10.2% were pre-hypertensive. Finally, 98% of the women had a moderate to high waist-hip ratio.

Table 3: Physical risks of the women in slums

Variables	Physical Risk Factors		Chennai*
	Categories	Percentage	
BMI	Normal	31.9%	33.1%
	Underweight	8.4%	5.9%
	Overweight	38.8%	38.2%
	Obese	20.9%	22.8%
Hypertension	Normal	59.3%	
	Pre-hypertensive	10.2%	
	Hypertensive	30.5%	26.7%
Waist-Hip Ratio	Low	2.0%	
	Moderate >.80	45.6%	86.8%
	High .90+	52.4%	
Heart rate	Normal	87.2%	
	Irregular	12.8%	

*Oommen et al. (2016)

A chi-square test ($df = 2$) found a significant difference ($p = .05$) in the proportion of slum women in the sample who had no risk factors ($n = 34$; 8.0%), women who had one or two risk factors ($n = 248$; 58.7%) and women with more than three risk factors ($n = 142$; 33.3%) (See Table 4). Contrary to expectations, the prevalence of NCD risk factors across the 18–49 age group was significantly higher than in the 50+ age group.

Table 4 NCD risk factors grouped according to three age categories following the WHO stratification (WHO 2014)

	Risk	Frequency (%)	Chennai
Aggregated			
	NONE	34 (8%)	
	1-2	(248) 58.7%	
	3+	(142) 33.3%	12.5%
Age categories			
18 - 33 (N=135)	None	11 (8.1%)	
	1-2 risk factors	81 (60.0%)	
	3+ risk factors	43 (31.9%)	
34 - 49 (N = 167)	None	10 (6.0%)	
	1-2 risk factors	96 (57.5%)	
	3+ risk factors	61 (36.5%)	
50+ (N= 122)	None	13 (10.7%)	
	1-2 risk factors	71 (58.2%)	
	3+ risk factors	38 (31.1%)	12.5%*

*Oommen et al. (2016) aggregated data

5.3.2 Qualitative findings

5.3.2.1 Awareness

We defined women as possessing *awareness* if they answered yes to the question of knowing what NCDs are and they were able to mention experiences of one. Women shared distinctive features of attitude as they recounted their personal experiences with NCDs and the risk factors. For many women, their awareness stemmed from experiential knowledge, both first- and second-hand, the disclosure of which was usually expressed through the emotion of fear. For example, the questioning of one participant suggested a belief that the fear of NCDs was commonplace: *“Why do you ask? Why do you want to know these things? Are you not afraid?”*. The same respondent further explained this fear: *“My mother had sugar (diabetes). I have it now and I know what will happen to me”*. Many participants stated that women in the community start to have problems with sugar, blood pressure (hypertension) and weight by their thirties or forties: *“We have seen it happen to many of our neighbours. It’s all coming to us”*. A helplessness was attached by respondents to the limited ability they possessed to impact their health within the slums, exemplified by one response: *“We are afraid but what can we do?”*. The constraints imposed by the slums were directly related to their health status: *“I am afraid to gain weight but I have nothing do. In this place, how can I exercise?”*.

5.3.2.2 Problems

In dealing with NCDs and their risk factors, participants shared two sources of problems – individual and institutional. At the individual level, respondents talked about the physiological difficulties they endure. The women often mentioned chronic pain and regular bouts of dizziness. As one of the participants said: *'I live on the third floor. I have to carry the water from the ground to my house. What can I do? We do not have water'*. An elderly participant spoke of similar experiences: *'I walked from here to the market every day. I am old. Under the heat of the sun, I feel so tired, dizzy and weak. One time, I collapsed. But life has to go on'*. Women commonly attributed their dizziness to either hypertension or anaemia.

Regarding pain, women frequently sought to downplay their complaints even though they would recognise the extra difficulty it brought to their household work. Respondents would usually point to body parts and describe it as *'all paining'* without further elaboration. In the institutional dimension of their problems, there was an observed agreement among the women about the barriers they face when they try to access health facilities about their NCD concerns. These barriers included their perceived access to available public health services, the attitudes of public health workers towards them and the low quality of the medications they received from government pharmacies. All these factors contributed to the perceived futility of using government-run hospitals among women. One of the elderly participants illustrated the quality of services they receive, saying:

'I went to GH (general hospital) for consultation for my diabetes so that I can get the free medicines. I stayed there for so long only to be told by the doctors that I do not have diabetes and that I go home. I told them that I am taking pills for sugar (diabetes) but they don't believe. They said I am making it up. After that, I never went back to GH for my diabetes. If my meds are few, I cut it so that it can last for 30 days'.

Another participant described their negative experience: *'We went to GH emergency because my daughter was in so much stomach pain. When we arrived, victims of an accident were just on the floor. I didn't know which was more horrifying, seeing my daughter in so much pain or the blood on the floor'*. The attitudes of staff when receiving healthcare services were summarised by one participant: *"They see you but not properly."* These attitudes appeared to breed a strong sentiment: *"I do not trust the GH."*

5.3.2.3 Actions

In all group and in-depth interviews, women voiced actions that they have taken to cope with their limited access to care. The interviewees described what they could do for other community members in times of illness:

“We exchange information. Little things like how to cook, where to get cheaper vegetables, how to lose weight. If somebody knows a good doctor that sees you well and other small things. This we do. It’s the only thing that we can do.”

They spoke of sharing information, and discussing their illnesses, fears, and concerns about their health. If a friend was sick, women would offer to help with household chores and they would sometimes help to contact health providers. Although the slum women cautioned that they could only help within the limits of their capacities and as permitted by their situation, they were not hesitant in showing care. As one of the participants shared: *“We care. We try to help in the small way we can. In this way, we cope with bp and sugar”*. Other participants reiterated the same sentiment, the rationale for which was summarised in one response: *“What else can we do but turn to each other?”*. The ability to act within their limited environment, through caring actions, was observed to breed feelings of solidarity, trust and friendship: *“We are friends... We share life... We are sisters”*. Participants were unanimous in their agreement of this sentiment.

5.4 Discussion

The survey findings substantiated evidence on the high prevalence of behavioural and physical risk factors among women in the slums. A high occurrence of between one and two risk factors was observed among slum women at an early age (18–33 years). The qualitative findings suggest a strong interplay in slum women’s lives between the limiting sociocultural and gender-related conditions endemic to slums and the deficient public health services they experience in the face of NCDs and their risk factors.

The findings on the high prevalence of NCD risk factors among slum women support the existing literature (Gupta et al., 2012; Banerjee, Mukerjee & Basu 2016). The high prevalence of risk factors – between one and three – observed among younger slum women aged 18–49 years qualifies previous findings on the urban health of the region (see Table 3). Compared with a reported prevalence of three or more risk factors among 12.5% of the urban population in Tamil Nadu (Oomen et al., 2016), 33% of slum women were identified as having three or more NCD risk factors. These findings suggest that slum women’s exposure to NCD risk factors spans all age categories, which may make them more susceptible to additional NCD burdens as they age or reach menopause.

It was observed that many slum women are physically active (67.5%), which counters the conventional view that slum women are often susceptible to NCDs due to an inactive lifestyle. Anand et al. (2007) found that 55% of slum women in a north Indian slum were physically inactive, yet the disparity in measured activity with this study could be a result of the different study locations. In a cross-sectional study of the relation between built environment and physical activity in Chennai, Adlakha et al. (2016) suggested that people in communities characterised by low socioeconomic status frequently have to travel – for work, food or water – which is a major source of physical activity. Women’s low rate of tobacco and alcohol use is expected given the taboos on slum women’s consumption of these substances.

The qualitative findings showed that slum women have a high awareness of NCDs and their risk factors. Manjrekar et al. (2014) had previously suggested that a lack of awareness into NCDs was one of the main causes of high NCD prevalence in slums. They reported that only 36.5% and 37% of the slum population were aware of the causes of diabetes and hypertension, respectively. The interviews conducted for this study demonstrated that slum women are aware of NCDs and their risk factors, specifically sugar (diabetes) and blood pressure (hypertension), which raises the question of why this awareness doesn’t result in appropriate behavioural change. The in-depth interviews point to slum women’s self-perceived lack of control in health decisions, leading to resignation – *‘what can I do?’* – coupled with fear – *‘I am afraid’*. This inhibits the acknowledgement of NCD problems and, in turn, prevents health-seeking behaviour and subsequent actions with local health services.

Slum women, the majority of whom are homemakers, continue with their work (e.g. cleaning the house, laundry, cooking, collecting water, picking their children up from school) even when they are in chronic pain or afflicted with other symptoms such as dizziness and difficulty in breathing. In a qualitative study of Indian women’s self-perception, Joshi et al. (2011) observed that cultural pressures to be a ‘good’ Indian wife require household chores to be completed without complaint, which can even have an impact on the family’s reputation in the community and bring honour to the husband. Moreover, in a qualitative study of Indian women’s lives, Vindya (2007) found that only serious illnesses warranted medical attention as a husband’s approval would be necessary for any health-related decisions.

Slum women consistently described their experiences in public hospitals akin to: ‘we are seen but not properly’. In a qualitative study of the urban poor’s experiences of government health services in South India, Ergler et al. (2011) found that slum women frequently experience humiliation in government health facilities, which discourages them from seeking further care. This finding echoes other studies that have described the poor quality, and sometimes negligent, health services provided to slum inhabitants (Balarajan et al., 2011; Baru et al., 2010; Kulkarni 2013; Kundu 2010). The asymptomatic nature of many NCDs, combined with

sociocultural pressures, personal inhibitions and negligent health services help to explain why it is easier for many slum women to ignore their NCD problems.

Alongside this, however, many slum women were observed to have developed coping strategies that enable them to access care in an alternative way. As corroborated by other studies, the personal care provided by neighbours when someone falls ill (Moser, 2011), the exchange of health information (Misturelli et al., 2011) and advice (Das, 2006), and the acknowledgement of illness (Alcock et al., 2009) provide an accessible and responsive care service to women in the slum community. The health needs and dependencies in the slums appear to create opportunities for care which women act upon. It is a coping strategy observed and practised spontaneously in the slums, established through the shared experiences of their limitations and taking the form of a response as: '*We are friends... We share life... We are sisters...*'. It is proposed that these care practices are an approach to tackling NCDs in slums that could be extended to the whole community (Kar et al., 1999; Unger & Riley, 2007).

5.5 Conclusion

The burden of NCDs and their risk factors affect slum women's lives. The asymptomatic nature of many NCDs, combined with sociocultural pressures, personal inhibitions and negligent health services underlie the decision made by many slum women to disregard their health problems. Practices have evolved among slum women, however, which look to bridge the gap in accessible care in the community. These coping strategies are practised spontaneously, established through the shared experiences of their limitations. In studying the gender-related aspects of NCDs in slums, we observed practices of care that serve community health needs and offer alternative treatment that could be strengthened or extended in the wider community.

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