

Unmet Health Care Needs Among Urban Poor Population of Thiruvananthapuram, India

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In recent times, a significant proportion of the global population lives in an urban context, as cities offer unparalleled opportunities for livelihood. In an urban setting, when a majority of programmes, data, and services focus on urban averages, the intra-urban differences are often missed, rendering urban health inequities invisible. The objective of this paper is to examine the unmet health care needs of the urban-poor population, through examining the many steps involved in having one's health care need to be met, from finding a suitable health provider through to having the health problem resolved. After providing an overall picture of unmet needs and associated barriers, we delve deeper into the pathways to unmet need for care for acute morbidity conditions.

A cross-sectional epidemiological survey was conducted to assess the health care needs of the urban-poor population and a series of case profiles to identify those people who get left behind within the poor urban section. The study population comprised the urban-poor population of Thiruvananthapuram Municipal Corporation. Households enlisted in the 'Below Poverty Line' (BPL) list ward-wise for urban Kerala were the study universe, and the sample was selected using multi-stage cluster sampling. The most recent episode of illness or health care need in the sample household within the reference period was documented, and five categories of health care needs were captured. We examined the outcome variable 'unmet health care needs' through a sequential five-step process: Sought health care; Consulted health provider; Started treatment; Completed/ On-going treatment; Health problem resolved.

The study covered 529 household members whose age ranged from one month to 90 years, with a mean age of 34 years. Among the 236 (39.9 per cent) study participants with a health care need, 123 (52.1 per cent) had an unmet need for health care. Amongst the different categories, unmet health care needs for acute morbidity conditions were noticeably higher (74.3 per cent). More than half of those with chronic conditions (53.9 per cent) or need for hospitalization (56.5 per cent) had unmet health care needs. Truncation of health care-seeking before resolution of the problem seems to be more drastic for acute conditions when compared with other types of health care needs. Of those with acute morbidity conditions, larger proportions were females (76.3 per cent) and those in the age group of 60 years and above (86.7 per cent). Both patient-related factors such as age, gender and occupation, and health system related factors such as availability and quality emerged as potential barriers to health care access. Both sets of factors played a role in creating urban health inequities. Case profiles depict the circumstances that result in unmet need and how multiple disadvantages play out creating intersectional inequities in an urban setting.

Documenting unmet health care need is a way of moving towards more equitable health care provision and reducing urban health inequities in the long run. This further helps a welfare state like Kerala to meet its Sustainable Development Goal (SDG) commitment to 'leave no one behind.'

Keywords : urban poor, unmet health care needs, health inequities

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In recent times, a significant proportion of the global population lives in an urban context as cities offer unparalleled opportunities for livelihood (Muggah, 2012). Urban living is a double-edged sword though bestowing on or depriving many people of conditions for healthy life. As more people migrate to urban areas, the process of unplanned urbanization gives rise to numerous health challenges. A study on the changing urban environment identifies five major types of health threats in urban areas. These are: infectious diseases that result from crowding and poor living conditions; acute and chronic respiratory illnesses related to air pollution; chronic, non-communicable diseases related to unhealthy lifestyle; injuries related to accidents and crimes; and problems associated with climate-change, such as heat strokes and flooding-related communicable diseases (Bai, Nath, Capon, Hasan & Jaron, 2012, p. 466). Bai et al., (2012) observe that these threats are unevenly distributed across the urban population.

Stephens (1996) draws attention to the inequitable distribution of health risks in the urban setting. She comments that many studies focus on urban poverty and its consequences but not on urban inequality. The author considers health as a fundamental measure of urban inequality and health indicators as a reflection of policy approaches. When some groups benefit at the cost of others, leading to a higher burden of risks and diseases in the second group, this is in fact, health inequity, i.e., a lack of justice. Health inequities are produced when one social group does not have control of their exposure to risk and ability to treat their health effects (Stephens, 1996, p.13).

In an urban setting, when the majority of programmes, data, and services focus on urban averages, the intra-urban differences are often missed, rendering urban health inequities ‘invisible’. Urban health inequities mainly arise from unjust differences in the social determinants of urban health, which operate not only at the individual and household levels but beyond. The role of governance, among other social determinants, is highlighted by Vlahov et al., (2007). They observe that growth of slums in both developing and developed countries is the result of poor urban governance, which does not provide primary housing, infrastructure, water supply and sanitation services to the urban poor. The illegal nature of slums excludes the slum dwellers from getting legitimate health and social services.

The urban health system also plays a significant role in contributing to urban health inequities. A paper introducing a framework for examining urban health observes that urban dwellers have to contend with poor public health infrastructure and a private sector of variable and unpredictable quality. Informal providers operate at one end of the spectrum, while large corporate hospitals with the prohibitive cost of services operate at the other end. Services that are good quality, as well as affordable, may be hard to come by (Butsch, Sakdapolrak & Saravanan, 2012). Public preventive health services in India – such as child immunization – often do not reach the most disadvantaged households in urban slums (Agarwal, Bhanot & Goindi, 2005). For example, a 2015 study from Delhi found that utilization of reproductive health care among urban poor households was much lower than the urban average (Devasenapathy et al., 2015).

This paper attempts to examine the paradox of high health care availability with poor health outcomes through the concept of unmet need. This concept was used in many European countries to examine the achievement of universal health care, wherein unmet need was ascertained by directly questioning individuals to find out whether there was a time that they needed health care but did not receive it, or whether they had to forego health care (Allin & Masseria, 2009).

Unmet need is also defined as “the differences between services judged necessary and services actually received.” This may also be interpreted as an indicator of health inequity. In the words of Andersen, “equity in access to health care is best considered in the context of whether people in need of medical care receive it or not” (As cited in Pappa, Kontodimopoulos, Papadopoulos, Tountas & Niakas, 2013, p. 2018).

Barriers to care for the urban poor can be either due to inadequate urban health infrastructure affecting the urban population as a whole or can be due to marked marginalization related to geographical and financial constraints as well as due to pure discrimination against the poor (Matthews et al., 2010, p.3). The purpose of identifying such barriers to health care at multiple levels will enable us to make policy recommendations on how these can be effectively addressed.

Kerala has a long history of well-organized public health services as well as a wide network of private health institutions. However, there still remain barriers to accessing health care, especially for urban poor, who are often left with a limited number of affordable health care options (Levesque, Haddad, Narayana & Fouriner, 2006). This paper aims to examine the unmet health care needs of the urban poor population in Thiruvananthapuram city of Kerala, by examining the many steps involved in having one’s health care need to be met. These steps range from finding a suitable health provider to having the health problem resolved. After providing an overall picture of unmet needs and associated barriers, we delve deeper into the pathways underlying the unmet need for care for acute morbidity conditions.

Methods

Study design and setting

This paper is based on a larger original study on the ‘Development of an urban primary level health care services package based on the assessment and prioritization of health care needs of the urban poor population.’ Data were collected through a cross-sectional epidemiological survey, which assessed the health care needs among the urban poor population in Thiruvananthapuram. The paper also reports findings from a series of case profiles of people who get left behind within the urban-poor section. Thiruvananthapuram Municipal Corporation of Kerala, India was chosen as the study setting. The percentage of urban population in Thiruvananthapuram district is 47.7 per cent (Census of India, 2011) and Thiruvananthapuram city alone accounts for 68 per cent of the urban population in the District (Government of Kerala, 2005). In 2014, under the National Urban Health Mission (NUHM), eleven Urban Primary Health Centres (U-PHCs) were started within Thiruvananthapuram Municipal Corporation. The distinct areas served by each U-PHCs were considered as our study setting. The study population comprised of the urban-poor population of Thiruvananthapuram Municipal Corporation. Households enlisted in the Below Poverty Line (BPL) rank list ward-wise for urban Kerala were the study universe.

Sample selection

The sample was selected using multi-stage cluster sampling, to reach the estimated sample size of 130 urban poor households. From the eleven U-PHCs, five were randomly selected, and two wards each were randomly selected from the five U-PHCs. We chose the first household in each ward with a random start from a list of urban poor households. We interviewed the female head of the household or the adult woman of the household next in seniority to the head. Five hundred and ninety two (592) individuals from 130 urban poor households were included in the study.

The cross-sectional survey was carried out from January to April 2017 and data was collected using a survey tool in the local language (Malayalam) developed by the principal investigator. The study obtained ethical clearance from the Institutional Ethics Committee of the concerned Institute.

Outcome variables: Met and unmet health care need

The last episode of illness or health care need in the sample household within the reference period was documented. Five categories of health care needs were captured. The categories of health care needs are:

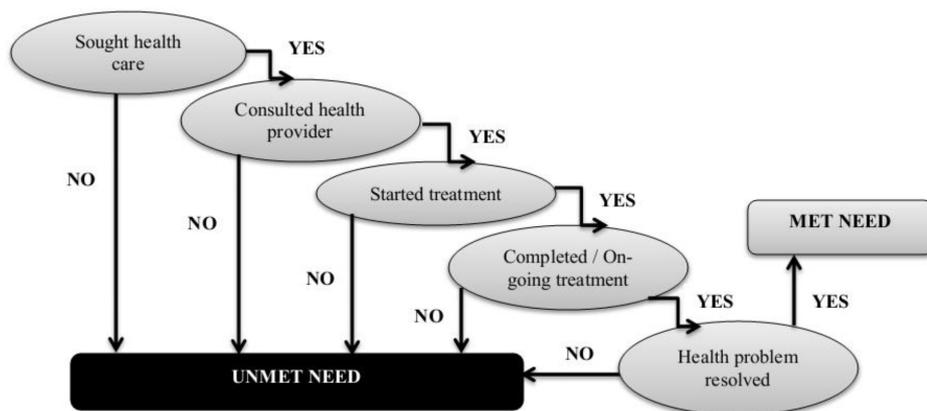
- Unwell with acute conditions in the past two weeks which led to the disruption of daily activities; not requiring hospitalization but requiring out-patient care.
- Suffering from any chronic condition requiring regular check-ups and medications in the past one month.
- Hospitalized in the past one year for any illness.
- Sought care for any maternal and reproductive health care need in the past one year.
- Sought care for any child health care needs in the past one year.

In this paper, the outcome variables of interest, namely met and unmet health care needs were defined as follows. A health care need was operationally defined as ‘met need’ when the person successfully sought and obtained health care, completed treatment and reported that the problem was resolved, or if the person subjectively considered his or her need as met even while undergoing treatment. Likewise, a need was operationally defined as ‘unmet need’ if the need was not met either because of not accessing health care or discontinuing before completing the course of treatment or if the person reported that his/her need was unresolved even after completing treatment or with continuing treatment.

We used a five-step process outlined by Tanahashi’s approach, which is principally a model to assess the health system bottlenecks, emphasizing the importance of the actual performance of the service as expressed by people who had received the service (Tanahashi, 1978). The steps (see Figure 1) are:

- Sought health care
- Consulted health provider
- Started treatment
- Completed/ On-going treatment, and
- Health problem resolved

Figure 1: Five-step Process of Identifying ‘Unmet Health care Needs.



The first step in identifying unmet health care needs was documenting who sought care, who did not seek care and what were the barriers they faced during the process of seeking health care. In the second step we identified, among those who sought health care, how many consulted the appropriate health provider, and if not, what were the reasons. In the third and fourth steps we documented among those who consulted health provider, how many started their treatment and how many completed treatment or were undergoing treatment respectively; and if they did not complete treatment, what the reasons were. In the final step, we identified how many considered their health problem or need as resolved and the whys and wherefores underlying it. Through this sequential process based on our operational definition, we classified health care needs into met and unmet health care needs.

Results

Overall morbidity profile

The study covered household members whose ages ranged from one month to 90 years, with a mean age of 34 years. In our study population, 327 (55.2 per cent) of the urban poor household members were females, and 265 members (44.8 per cent) were males respectively. The proportion of those who had any health care need was 236 members (39.9 per cent). Eighty- four males (35.6 per cent) and 152 (64.4 per cent) females reported having one or more health care needs. The percentage distribution of the five different categories of health care needs across the study population is shown in Figure 2.

Figure 2: Distribution (per cent) of Diverse Categories of Health care Needs in Study Population.

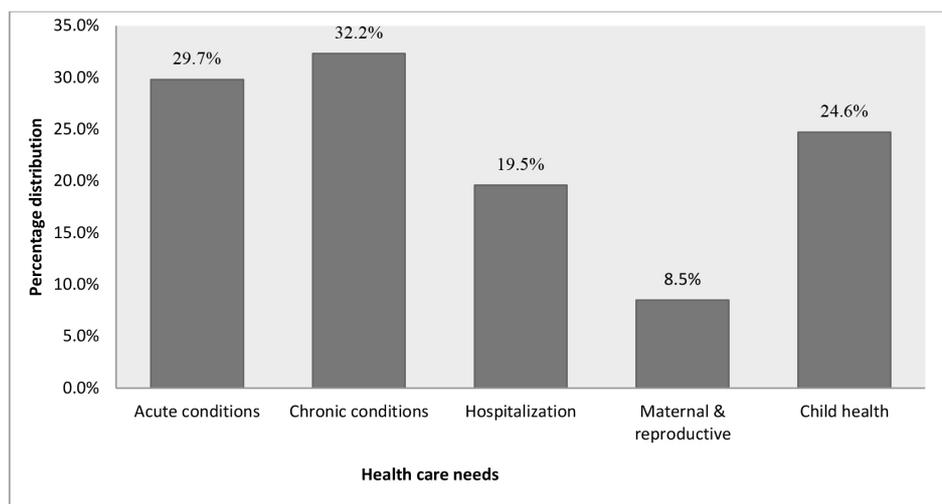


Table 1: Details of Ailments in Different Categories of Health care Needs

Categories of health need	N (per cent)
Acute conditions	70
Body pain, knee & joint pain	17 (24.3)
Headache	6 (8.6)
Vomiting, gastritis	2 (2.9)
Poisoning, Bites, Stings, Trauma, Minor injuries, Fracture, Burns & Corrosions	6 (8.6)
Fever & other infections	22 (31.4)
Acute episodes of Non communicable diseases	11 (15.7)
Occupational diseases	1 (1.4)
Skin & autoimmune diseases	2 (2.9)
Dental health problems	3 (4.3)
Chronic conditions	76
Non communicable diseases	57 (75)
NCD-Cancer	9 (11.8)
NCD-Mental health	4 (5.3)
Skin & autoimmune diseases	4 (5.3)
Eye & ENT diseases	2 (2.6)
Hospitalization	46
Gastritis	1 (2.2)
Poisoning, bites & stings	1 (2.2)
Injuries & fractures	5 (10.9)
Fever	8 (17.4)

Chronic communicable diseases (TB)	2 (4.3)
Non communicable diseases	22 (47.8)
NCD-Cancer	5 (10.9)
Eye & ENT diseases	2 (4.3)
Maternal & reproductive health	20
Pregnancy	9 (45)
Need for family planning	2 (10)
Disorders of menstruation	2 (10)
Uterine fibroids & cancers	1 (5)
Inability to conceive	5 (25)
Anaemia	1 (5)
Child health	58
Immunization	25 (43.1)
Post-natal health care	2 (3.4)
Common childhood illness	20 (34.5)
Chronic diseases	7 (12.1)
Allergic reactions	4 (6.9)

Notes: N (per cent) – Number (percentage), NCD – Non Communicable diseases, ENT – Eye Nose & Throat, TB – Tuberculosis.

Among those with any health care needs, chronic conditions were the most reported. Seventy members (29.7 per cent) were unwell with acute conditions in the past two weeks which led to disruption of daily activities requiring out-patient care; 76 members (32.2 per cent) had chronic conditions requiring regular check-ups and medications in the past one month, and 46 members (19.5 per cent) were hospitalized in the past one year for any illness. Maternal, reproductive and child health care needs were recorded separately. Twenty members (8.5 per cent) had maternal and reproductive health care needs, and 58 members (24.6 per cent) had child health care needs in the past one year.

Table 1 displays the distribution of ailments among different categories of health care needs. Among those who were unwell with acute conditions; 31.4 per cent suffered from fever and other infections followed by 24.3 per cent with body pain, knee and joint pain and 15.7 per cent suffered from acute episodes of Non-Communicable Diseases (NCDs). It was found that NCDs were the leading cause of health care need for chronic conditions (75 per cent) and hospitalization (47.8 per cent). NCDs in the study population included conditions such as hypertension, diabetes, hypercholesterolemia, stroke, hyperthyroidism, kidney complaints and breathlessness. In maternal and reproductive health care needs, pregnancy (45 per cent) and inability to conceive (25 per cent) were commonly observed followed by the need for family planning and disorders of menstruation. In child health care need, immunization (43.1 per cent) followed by common childhood illness (34.5 per cent) was predominantly seen. Common childhood illness broadly covered viral infections, fever, diarrhoea, cough, cold, worm infestations and other infections.

Unmet health care needs across different health categories

Out of the 236 people with a health care need, 123 people (52.1 per cent) reported an unmet need for health care; a larger proportion of those with unmet needs were females (65 per cent). In this section, we examine the ‘unmet health care needs’ through a sequential five-step process across five domains: Sought health care→Consulted health provider→Started treatment→Completed/On-going treatment→Health problem resolved. Figure 3 displays a stacked bar-chart showing the distribution of met and unmet health care needs across the categories of health care needs. Results show a wide variation in met and unmet health care needs across the various categories. Met health care needs for acute conditions were significantly lower at 25.7 per cent when compared to other categories. This implies that a larger proportion of 74.3 per cent of needs were unmet during the course of health care seeking. More than half of those with chronic conditions (53.9 per cent) or with a need for hospitalization (56.5 per cent) had their health care needs unmet. Unmet health care needs for maternal and reproductive health as well as child health were considerably low at 40 per cent and 13.8 per cent respectively.

Barriers to health care access

Study results show that respondents faced various barriers while accessing health care. These included both health system and personal factors. We classified the barriers to health care access encountered in each of the five steps for met need (see Table 2). For hospitalization and maternal and reproductive health needs, a major proportion reported no barriers while accessing health care (Figure 3). Among those who were unwell with an acute condition, 18 people (25.7 per cent) did not seek health care, because they faced either accessibility, acceptability or multiple barriers while accessing health care. On the contrary, among those who were hospitalized, 31 people (67.4 per cent) faced a barrier during the course of hospitalization. Of all the five steps for met need, barriers to seeking health care was a predominant category and acceptability issue related factors emerged as the predominant one.

Figure 3: Distribution of Met and Unmet Health care Needs Across Categories of Health care Needs.

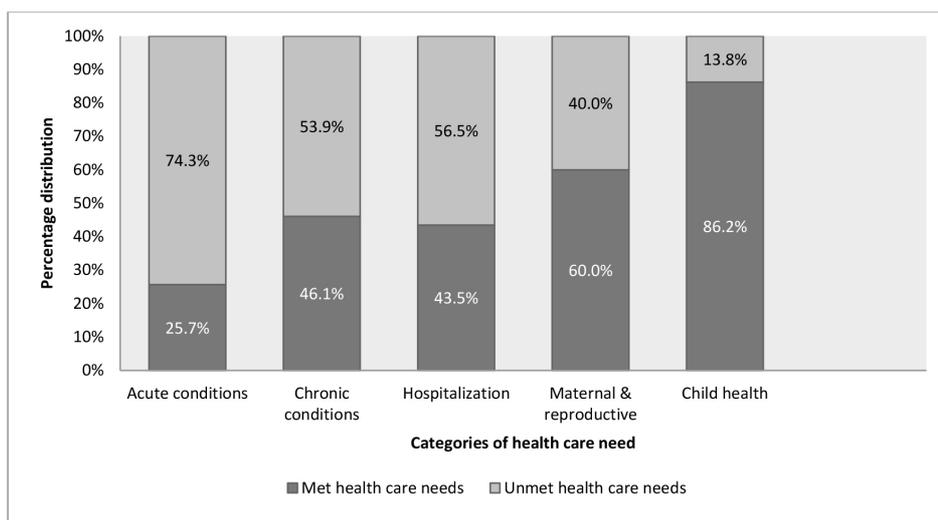


Figure 4: Truncated Health Care Seeking Pattern Across Different Categories of Health care Needs.

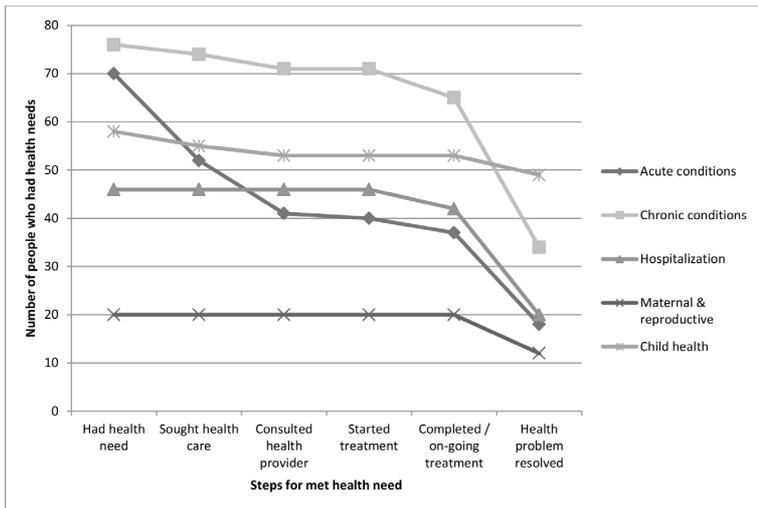


Table 2: Types of Barriers to Health Care Access Encountered at Each of Five Steps

Identified barriers
<p>I. Barriers to seeking health care</p> <ul style="list-style-type: none"> • Non availability of attached laboratory facility • Non availability of preferred AYUSH health facility • Non availability of doctors and health care staffs in the facility • Non availability of qualified staffs for specific health needs • Non availability of drug supplies • Non availability of other supplies and equipment's • Health facility located far away • Financial cost of accessing care • Transportation difficulties • Health facility located far away • Long waiting hours • Non-availability of accompanying person • In-convenient working time • Inability to take time off from routine tasks • Need to take leave for accessing care • Reluctant to receive medical treatment (personal preferences, religious beliefs) • Lack of privacy • Ways of treatment procedure not advanced according to personal preference • Indifferent behaviours of health care providers • Absence of doctors of preferred sex (male/female) • Distrust the quality of care provided • Do not consider treating ailment as important • Past negative incidents associated with the health facility • Stigma associated with such hospitals (Example: TB hospitals)
<p>II. Barriers to consulting a health care provider</p> <ul style="list-style-type: none"> • Prefer buying medicines from medical shop • Long waiting hours • Reluctance to take medical treatment from a hospital • Past negative incidents associated with health facility • Ways of treatment not advanced according to personal preference
<p>III. Barriers to starting treatment</p> <ul style="list-style-type: none"> • The financial cost of treatment
<p>IV. Barriers to completion or continuation of an on-going treatment</p> <ul style="list-style-type: none"> • Treatment was considered expensive / financial crisis • Could not continue treatment as health facility was located far away • Difficulty in adjusting to drugs and treatment instructions • Fear factor • Irregular supply of medicines • No other treatment option available (terminal stage) • The absence of a caretaker or accompanying person

V. Barriers to considering health problem as resolved

- Unable to access referral care
- Unable to bear the high cost of drugs and treatment in the continuum of care especially for chronic diseases
- Treatment was unsuccessful and led to serious complications

Table 3: Steps in Identifying ‘Unmet Health Care Needs’ for Acute Conditions

Domains	Categorization of domains for identifying the variable ‘unmet health care needs’ for acute conditions N (per cent)	
	YES	NO
Sought health care (70)		
Consulted health provider (52)	52 (74.3)	18 (34.6)
Started treatment (42)	42 (81)	10 (19.2)
Completed / On-going treatment (41)	41 (97.6)	1 (2.4)
Health problem resolved (37)	37 (90.2)	4 (9.8)
	18 (48.6)	19 (51.4)
	18 (25.7)	52 (74.3)
	Met need	Unmet need

Note: N (per cent) – Number (percentage).

Truncation of health care seeking before resolution of the health care need

Amongst the different categories of health conditions considered, unmet health care needs for acute conditions were noticeably higher. When we traversed through each step for identifying unmet health care needs for acute conditions, there seemed to be a sequential fall in met health care need with every step (see Figure 4). Truncation in health care seeking seems to be more drastic for acute conditions at the point of seeking care and while consulting a health provider. However, things are different for other types of health care needs. With chronic conditions and hospitalization, the reduction in met need seems to take place from completed or on-going treatment to the point of considering their health problem as resolved. For maternal and reproductive and child health, unmet health care needs were only noticeable in the last domains.

Unmet health care needs for acute morbidity conditions – a detailed examination

After identifying the extent of unmet need and the health conditions where these are most seen, this paper focuses only on one category to delve in-depth: acute health problems. The descriptive analysis illustrated in Table 3 gives evidence on why health care seeking gets truncated and important reasons that were reported as causing this. Among those who had acute conditions, 18 persons (34.6 per cent) did not seek health care due to single or multiple barriers. Among those who sought health care, 10 people (19.2 per cent) did not consult a physician; surprisingly all of them sought health care from medical shops and chose not to consult a physician. The conditions for which people sought health care from medical shops were mainly fever, body pain, knee and joint pain, and acute episodes of non-communicable diseases. One person could not start the treatment because of not being able to afford the laboratory tests prescribed by the consulting physician. Among those who started their treatment, four persons (9.8 per cent) did not complete their treatment for reasons such as distance to health facility, and difficulty in physically coping with drugs and treatment

instructions particularly pertaining to diet restrictions. Lastly, 19 persons (51.4 per cent) considered their health problem as not resolved as their problem still persisted, or they suffered from related symptoms or as they could not seek higher referral care.

Within-group differentials in unmet need for acute morbidity conditions

The group differentials in unmet need for acute morbidity conditions are shown in Table 4. A larger proportion of females (76.3 per cent) reported an unmet need for health care when compared to males (63.6 per cent). Out of seven men who experienced an unmet need, the majority (57.1 per cent) reported an unresolved health condition. This means that they experienced unmet need at the last step after accessing health care. The case is entirely different for women - 37.8 per cent of women did not even seek health care, and their needs were unmet at the very first step of health care seeking.

A larger proportion (86.7 per cent) of those in the age group of 60 years and above, did not have their health care needs met. Of the 13 unemployed persons, the majority (41 per cent) did not even seek health care. Interestingly, being enrolled in state-sponsored insurance scheme for BPL population did not make a significant difference to whether or not a person's health care needs were unmet. This may be because the insurance schemes cover only inpatient care and not all health care needs. These intra- group differentials among those with an unmet health care need for acute conditions highlight how multiple inequities play their part in influencing care-seeking.

Table 4: Group Differentials in Unmet Need for Acute Morbidity Conditions

	Gender(N)		Age group(N)		Occupation status(N)		Insurance enrolment(N)	
	Male (11)	Female (59)	Less than 60 years (55)	60 years and above (15)	Unemployed (42)	Employed (28)	Enrolled (28)	Un-enrolled (42)
STEP-1: Did not seek health care	1	17	13	5	13	5	9	9
STEP-2: Did not consult a health provider	2	8	9	1	6	2	8	4
STEP-3: Did not start treatment	0	1	1	0	0	1	1	0
STEP-4: Not completed / nor undergoing treatment	0	4	4	0	2	2	3	1
STEP-5: Health problem unresolved	4	15	12	11	8	7	12	
Had unmet need for health care for acute morbidity N(per cent)	7 (63.6 per cent)	45 (76.3 per cent)	39 (71 per cent)	13 (86.7 per cent)	32 (76.2 per cent)	20 (71.4 per cent)	21 (75 per cent)	31 (74 per cent)

Note: N (per cent) – Number (percentage).

The interplay of multiple disadvantages resulting in an unmet need for health care

The discussions has so far focused on unmet needs by a single axis of disadvantage. However, observations in the field showed that often, multiple disadvantages came together to deprive a person of needed health care. Based on observations and interactions, we depict selected case profiles that illustrate this.

Case profile – 1

A 62-year-old woman is the head of a household and a fish seller. She buys fish in bulk from the market and sells fish from house to house, carrying the heavy basket on her head and walking almost all day. Her alcoholic husband beat her brutally and left her when she was just 29 years old. She is single since and has raised her two boys by herself.

A year ago when she was selling fish seated on a roadside pavement, she was hit by a scooter, and suffered a fracture on her left leg. She was not enrolled in any insurance scheme and underwent

treatment in a private hospital. Her expenses were met by the scooter owner, and she did not incur any out-of-pocket expenditure. But this did not mean that there were no other problems. She could not get adequate rest and resumed fish-selling as soon as she could. Even after one year, she still suffers from frequent episodes of severe pain in her fractured leg. Selling fish is her only source of income and walking with a heavy load on her head aggravates the pain at the fractured site. She cannot take time off for seeking health care because that would mean loss of income.

Case profile – 2

A 34-year-old woman divorcee, who is unemployed, lives with her parents who belong to the low-income group. She was divorced as her family was not able to give dowry as previously agreed. Three months ago, she developed frequent episodes of difficulty in micturition. Accompanied by her mother, she accessed care at the Taluk hospital, far from her house as she did not want her condition to be known by neighbours. The doctor advised her to go for laboratory tests from a private facility. Although she is enrolled in an insurance scheme, she could not undergo laboratory test as tests are not covered by her insurance scheme.

Case profile– 3

A 34-year-old man lives in a rented house with limited facilities, with his wife and two daughters. He is a heavy vehicle driver. His job takes him away from home for several days at a time, driving across different states. He suffers from frequent episodes of backaches, mainly owing to his occupation. He cannot afford to leave his job as he is paid adequately, and no other job will fetch him an equivalent income. During earlier episodes of backache, he went to government medical college and each time, took time off from work, resulting in loss of wages. He is therefore not able to seek proper care, and his problem remains unresolved.

These three case profiles depict how multiple axes intersect in the lives of the urban poor. In the first case profile, physical ailment affects the person's work life, and she is unable to take any time off from daily work. The second case profile illustrates difficulties faced by a female divorcee in accessing health care for gynaecological problems from nearby health facilities. Social and financial factors together influence her access to care, and enrolment in insurance did not help overcome these barriers. The third case profile reflects an apparent occupational health problem of the main income earner in an urban -poor household with a well-paying job, caught between a desire for a better life for his family, and the daily reality of a health issue aggravated by work. In all the three case profiles, the multiple disadvantages of one's social position, gender, occupation, and availability of appropriate health services play their part at one or many steps resulting in an unmet health care need that will need more than a doctor to overcome.

This detailed examination of unmet health care needs for acute morbidity conditions illustrates how equity in access to health care shapes one's health-seeking behaviour and determine whether or not a health care need is met.

Discussion

The study shows how the health care needs of an urban poor population in Thiruvananthapuram, Kerala, with well-distributed public and private health care institutions are still left 'unmet.' The aim of the paper was to examine the unmet health care needs of the urban poor population, by examining the major steps involved in having one's health care needs met.

Most studies on unmet need in India focus on family planning. One study examined the unmet need for public health services in Mumbai (Dilip & Duggal, 2004). In their study, a health care need was defined as ‘met’ if there was a public facility available in their neighbourhood, which could potentially meet their health need. A study by Shi and Stevens (2005) specifically looked at unmet health care needs owing to cost and examined the risk factors or ‘vulnerabilities’ associated with unmet needs owing to cost. They found out that people who are having low income, uninsured and having no regular source of care are likely to delay the needed health care due to cost.

Many studies consider unmet health needs as an indicator of access to health care (Allin & Masseria, 2009). Apart from access, Chen and Hou (2002) claim that it is important to understand the availability, accessibility or acceptability barriers associated with unmet health care needs.

Our study is among the few that examine unmet need as consisting of five steps wherein multiple barriers may be encountered. It also considers five different categories of health needs rather than ask more generally about ‘any health care need’. This method traces multiple types of health care needs and multiple points at which a health care need can become unmet. It shows that availability, accessibility, and acceptability alone do not guarantee met need. Taking resolution of the health problem as the indicator of ‘met need’ gives a truncated pattern of health care seeking, which allows us to visualize the point of disbandment from the care-seeking pathway.

We find that overall, for 52.1 per cent of those with any health care need, their need was unmet. This is higher as compared to other studies; a 2016 study assessed the unmet need for family planning in an urban area of south India to be at 20.5 per cent (Vasudevan & Soundarya, 2016). Our higher figures are a result of the definition which captures unmet need at various stages of health care seeking. An article on the importance of measuring unmet health care needs, states that unmet health care needs should be a core component of any health system assessment (Gauld, Raymont, Bagshaw, Nicholls & Frampton, 2014, p. 64). Gauld et al., (2014) further concluded that such assessment should be based on documenting unmet health care needs as perceived by representative segments of the population through formal interviews (p. 65). This study also adopted such an approach.

The proportion of our study population with any health care need was at 39.9 per cent which is significantly high when compared to 21.8 per cent of ailing persons during last 15 days in urban Kerala (Government of Kerala, 2016). This finding is also consistent with the well-known paradox of low levels of mortality coexisting with high morbidity in Kerala (Suryanarayana, 2008, p. 3).

The findings of the study clearly indicate that met health care needs for acute morbidity conditions were significantly low, creating a much larger proportion of unmet needs. This larger proportion of unmet health care needs were seen especially among women, the elderly and among the unemployed. This finding to some extent is consistent with findings from a study in the US where risk factors such as low income, no health insurance coverage and lack a regular source of care influenced the likelihood of having an unmet health need due to cost (Shi & Stevens, 2005).

Findings of our study indicate that both health system and patient factors influence unmet health care needs and urban health inequities. Chen and Hou (2002) reported health system factors such as long waiting time, non-availability when needed, and cost, as the main health system-related reasons for unmet health care need. In the present study as well, non-availability of appropriate services in the vicinity, costs and poor perceived quality of care were stated as reasons for unmet need.

Studies tend to look at a single axis of disadvantage in a vertical fashion as enhancing the risk of unmet health care need in a population. Our case profiles, although rudimentary, suggest the importance of considering multiple axes of disadvantages simultaneously. For example, the nature of one's health problem interacts with social position, gender, occupation and the availability of health services to render a health care need unmet. Single point interventions would not be adequate to change this situation.

Our study has some limitations. We measured unmet need from the respondent's subjective point of view. While this has its advantages in that subjective perceptions influence health care seeking patterns, there may be an over-estimation of unmet need especially in a highly medicalized society like Kerala.

Conclusion

Kerala reports high levels of health care availability and utilisation, with a population that is well aware of its health care needs. It appears that despite such an apparently good scenario, the unmet health care needs of marginalised populations are being overlooked. Documenting the unmet health care need is a way of moving towards more equitable health care provision and reducing urban health inequities in the long run.

Our study findings suggest the need for greater coverage by public sector health facilities and personnel, and by social health insurance schemes for low-income groups, in poor urban neighbourhoods in Kerala. This would prevent pushing poorer patients to seek care in the private sector, remove cost barriers to seeking care, and mitigate the bulk of unmet need. However, health sector action alone would not be sufficient. Many of the reasons why health care is not sought or treatment is not completed are related to the lack of social safety nets and social security that would prevent the sick from needing to work when unwell. Many illnesses are caused or aggravated by the poor living and working conditions of the majority of the urban poor. For Kerala to meet its Sustainable Development Goal (SDG) commitment to 'leave no one behind,' attention to urban health inequities is an urgent priority.

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