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Research Article

Disease Burden and Health Inequalities in Punjab-Understanding Economic and Social Consequences

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A B S T R A C T

Punjab has been one of the fastest-growing and richest states in India. But in the last few years its economy has been declining and ill-health plaguing people of all ages. Among adults the leading causes for increasing disease burden are obesity, high blood pressure and high cholesterol. All these cumulatively contribute to heart disease, diabetes, thyroid disorder and cancer. The contribution of this risk group has increased massively to a quarter of the total disease burden in India. The combination of these risks was highest in Punjab is evident from the socio-economic development and health status. Punjab has good development indicators and at an advanced epidemiological transition stage. However, Punjab had 157% higher per person burden from diabetes, 134% higher burden from ischaemic heart disease, 49% higher burden from stroke and 56% higher burden from road injuries. Consistent with these findings, Punjab had substantially higher levels of cardiovascular risks as compared to many other states is evident from an ICMR, PHFI and IHMEI report of 2017. All of these risks are generally higher in males than in females. And even treatment seeking is high among males as compared to females. There are stigmas related to disease, so most of the people keep it a secret. National Family Health Survey-4, 2015-16 data provides information on the prevalence of diabetes, hypertension, thyroid disorder, heart disease and cancer. This paper aims to examine the reported illness and the constraints in accessing the health care services; and to understand how the changing disease burden is disturbing the life style of the people.

Keywords: Disease Burden, Morbidity, Cancer, Tuberculosis, Asthma, Health Seeking Behavior, Inequalities

Introduction

There are two factors of critical importance to public policy for health. For the diseases in which government investment was substantial, namely, malaria and other vector-borne diseases, TB, leprosy, reproductive health and childhood conditions, there is scant high-quality epidemiological

information and authenticated data for arriving at any estimations on prevalence or incidence. Disease burden estimations based on sound epidemiological research provides the foundation for public policy. There are some priority health conditions which are considered as significant public health problems which affect all segments of the population. Likelihood of the burden of a specific health condition falling on the poor, such as infectious and vector-borne conditions, tuberculosis and some maternal and child health conditions are important in this context. In the absence of interventions, some health conditions continue to impose health burden such as cancers, cardiovascular conditions and diabetes, or new infections such as HIV/AIDS. The possibility of a health condition driving a large share of population into financial hardship, including their falling below the poverty line is of extreme relevance for public policy environment. India ranks eleventh among sixteen countries in age-standardised death rate per 100,000 population,[1] accounts for 17.5% population of the world and bears the burden of 20% of global diseases.[2] This burden is spread iniquitously, much like other variables, across states. Based on their Epidemiological Transition Level (ETL) in 2016, the states of India were categorized.[3] The ETL was defined as the ratio of all-age DALYs due to Communicable, Maternal, Neonatal and Nutritional Diseases (CMNNDs) versus those due to Non-Communicable Diseases (NCDs) and injuries together. A smaller ratio indicated advancing epidemiological transition ie, higher burden of NCDs and injuries than Communicable, Maternal, Neonatal and Nutritional Diseases (CMNNDs). Those states with ratios less than 0·31 had high ETLs denoting less burden of disease. These included Himachal Pradesh, Punjab, Tamil Nadu, Goa and Kerala with a total population 152 million (Nations within a nation: variations in epidemiological transition across the states of India, 1990-2016 in the Global Burden of Disease Study India State-Level Disease Burden.[4] Although Punjab figures among the five states with lowest burden of disease, among other states, there are some inherent health issues which need to be addressed.

Punjab, at one time, was India's fastest-growing and richest states. But in the last few years its economy has been declining and ill-health plaguing people of all ages. Among adults the leading causes for increasing disease burden are obesity, high blood pressure/ sugar and high cholesterol. All these cumulatively contribute to heart disease, diabetes, thyroid disorder and cancer. The contribution of this risk group has increased massively to a quarter of the total disease burden in India. The combination of these risks was highest in Punjab.[5]

Punjab has good development indicators and at a advanced epidemiological transition stage. However, Punjab had 157% higher per person burden from diabetes, 134% higher burden from ischaemic heart disease, 49% higher burden from stroke, and 56% higher burden from road injuries. Consistent with these findings, Punjab had substantially higher levels of cardiovascular risks as compared to many other states.[3] All of these risks are generally higher in males than in females. And even treatment seeking is high among males as compared to females. There are stigmas related to disease, so most of the people keep it a secret. National Family Health Survey-4, 2015-16[6] data provides information on the prevalence of diabetes, hypertension, thyroid disorder, heart disease and cancer. With this changing scenario this paper aims to examine the reported illness and the constraints in accessing the health care services and to discuss how the changing disease burden is disturbing the life style of the people.

Materials and Methods

The data source for the present paper is National Family Health Survey 4, 2015-16.[6] Relevant tables have been used from the volume on Punjab to examine the empirical evidences on disease burden in the State. The NFHS-4 survey in Punjab, presents key indicators on health besides socio-demographic, economic, health services. Conceptual visualization has been done using flow diagrams.

Policy Environment for Health

Health policies and programmes in almost all developing countries have emphasized on mother and child and acknowledged their needs. The health service concerns embedded in India's population policy are deeply rooted in the concern with population growth. As a signatory to the Alma Ata Declaration, India aimed to achieve the goal of `Health for All' by 2000. We are still in want of attaining many targets. In fact, promotion of mother and child health has been the most important objective of the family welfare programme of India, and has been evident since the first five-year plan (1951-56). As a part of Basic Needs Programme initiated during the Fifth Five Year Plan (1974-79), maternal and child health and nutrition services were integrated with family planning services as part of larger development concerns. Since then, the thrust has been to provide at least a minimum level of public health services to populations across social groups. Although, the support for specific diseases evolved in the form of health programmes, for example, National Malaria Eradication Programme, occurrence of disease and the burden thereof continued to pose threat to health and challenges to the health service system. Bereavement arising out of severe and terminal morbidity conditions, however, did not form a part of any policy including the Health Policy of 2017.[7] While there are evident changes in the health status of India as a whole, disaggregated differentials on varied axes of vulnerability like caste, religion, ethnicity, place of residence and disability, for instance, tell a different story. There has been a continuous reluctance to recognize the needs of

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women belonging to vulnerable groups and the issue has remained marginalized in the policy agenda. Thus terminal disease induced bereavement becomes additionally painful for the households in the light of expenditure already incurred in treatment.

The National Health Policy 2017 shows its concern for specific groups based on varied axes of vulnerability. Caste-based social structure has excluded Dalits from access to resources, schemes and services [8-11] They have remained backward in education, livelihoods, and opportunities to live a life with dignity. This continues to affect their health status and access to resources, which enable addressing health status. The Joseph Bhore Committee Report, 1946,[12] pointed towards the inequitable access to resources which has resulted in health status differentials across social groups. Providing health care access to the vulnerable population groups is the responsibility of the state. All the more when the financial burden of curative care is higher among economically vulnerable, most of whom are Dalits.[11,13-14] Thus there are a set of factors which impact on disease burden. Current health status, socio-economic condition, awareness, health service system, providers and their concern towards equitable provisioning, programmes and policies and disease induced stigma are crucial in attributing towards disease burden (Figure 1).

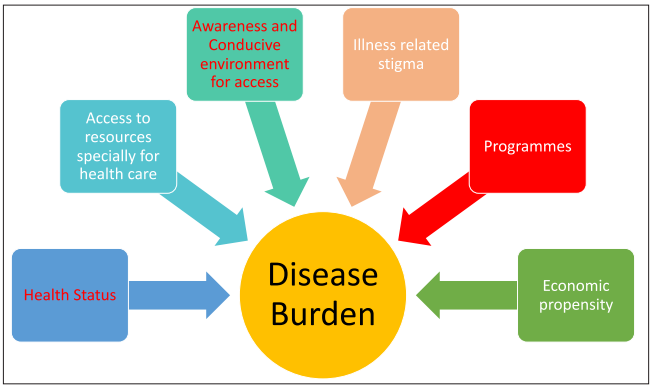

Figure 1.Factor Associated with Disease Burden

Inequalities in Health

Inequalities in health vary across socio-economic groups in terms of health outcomes, access to health services and utilization of health services. The three 'Ds'- delay in recognising the illness; delay in reaching the care centre/ provider; and delay in providing care become instrumental in denial of access to resources for health care seeking. Disparities, therefore, exist in utilization of services as much as the differential pace of economic and social development, and distribution of the benefits of development along with the inadequacy of the public health care systems to deliver equitable health services.[13,15-17] In this light, therefore, the argument that addressing economic disparities will eventually take care of social inequalities too, needs to be revisited. There is an inherent discord in this framework. Gender and economic factors are amply illustrated and argued. Caste based determinants and consequences of deprivation and denial are not adequately illustrated in the context of maternal and child health and wellbeing. Caste based predictors have mostly been seen from the lens of socio-economic indicators. Emphasis has been on income disparities while social identities have remained marginalized. Access in consonance with availability and perception of self follows the path to utilization. Access, availability and perception of self leads to utilization of services. Access translate into utilisation through the web of adequate resources, conducive policy regime and providers' sensitivity to social heterogeneity as a factor of differential access; and perception of self. Measuring the sensitivity of providers towards the issues of enabling environment for utilization of services still awaits a meaningful framework for generating the data base.[10-11,18,19] Access is the function of awareness, information, knowledge; and encouraging setting to use them and proclivity to overcome inhibitions and impediments for interacting with providers and institutions. Lack of appropriate opportunities and mechanisms to access opportunities for education and income generating activities result in poor living conditions including housing, health, nutrition, lifestyle, and social environment. Availability of resources is dependent on the procurement chain. From the place where the resource is generated, through the market to the providing intuitions and/ or providers to the users there are various actors involved. Policy environment, market and marketing, media and advertisement, motivation and buying capacity of the users collectively impact the demand-supply cycle of resources and thus their availability. How an individual creates self-image has elements of the image created (of the individual) by the others. Thus, created positive images enhance confidence and check inhibitions. They are therefore, cherished. Negative images of self, often stem from biases and stereotypes of the others, are resented. Continuous efforts are made by the affected to deconstruct them.[10,18,19] Thus, utilization of resources and services is determined by three factors- access, availability and perception of self (Figure 2).

Thus, bereavement caused by disease induced deaths are embedded in poor services, non-conducive environment, poor propensity, difficult topography and awareness creating mechanism, as much as it is in the differential access to services. Management of complications during illness; hygiene during care and the first critical hours after occurrence of illness event, for example heart attack; and care require appropriate skilled management. Access to these services are differently manifested across social groups. Communicable diseases and deaths induced due to them often lead to stigma, which then needs special skills to address the outcomes.[20-21]

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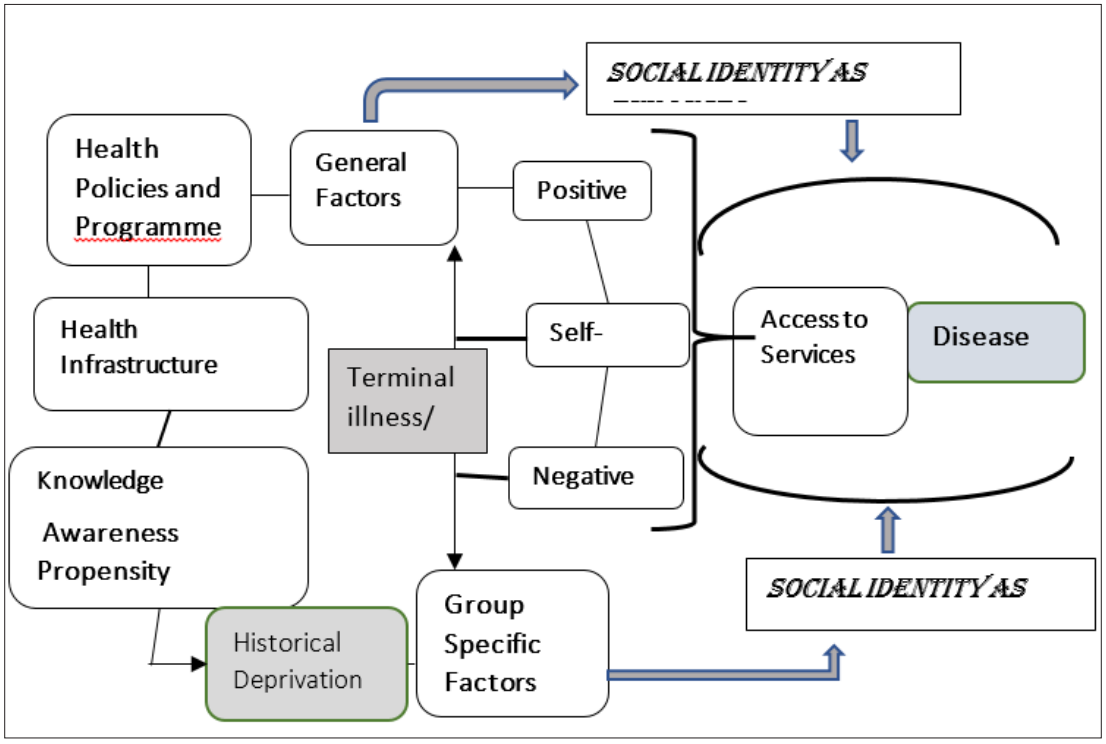

Figure 2.Conceptualising Social inequalities in Disease burden

Source: Compiled by Author, adapted from[10-11]

Disease Situation in Punjab

Punjab has been known for its agricultural prosperity and thus the healthy image of its people. However, in the recent years, the state has shown a growing crisis with increase in severe and chronic diseases without a sound public health system. Some studies[5,20-23,26] have found that the health status in Punjab needs urgent attention. While the state had done well in reducing Maternal Mortality Rate (MMR) and Infant Mortality Ratio (IMR), it was currently struggling with diseases like hepatitis C, learning disabilities, cancer and reproductive disorder, high prevalence of cerebral palsy, arthritis, among others. Arthritis is reported by young people as early as in their twenties.

A large proportion (58%) of elderly people are reported to be suffering from depression as evident from a study conducted by the department of Psychiatry, Post Graduate Institute of Medical Education and Research (PGIMER).[20] As many as 50-60 per cent of young people in the 16-35 years age group are addicted to drugs was evident from a study commissioned by the Ministry of Social Justice and Empowerment, Government of India.[21] Ten districts were covered in the study which highlighted that 89% of drug users are literate and 83% are employed. Almost all (99%) are male; and more than half (56%) are from rural areas. It was reported that on an average, the expenditure on drugs in a day for an addict, ranges from Rs 1400 on heroin, to Rs 340 on opiates and Rs. 265 on pharmaceutical drugs.[21]

The burden of disease has forced people to sell their properties and/ or wealth to raise money for the incurred cost of treatment, particularly in private hospitals. Cancer is another disease which has inflicted the people of Punjab, specially Muktsar district, which has earned the nomenclature of the "cancer capital" of Punjab. Every village of the district has at least one cancer afflicted person and In one of the villages, Kotkapura, nearly all households have had at least one cancer patient.[21] CMNNDs are most common cause of death, while NCDs become the major cause of death progressively in ages 15+ years. Diarrheal diseases (12.9%) were the major causes of DALYs in 1990, while in 2016, ischemic diseases (17.1%) replaced diarrhea. The risk factors during the most deaths and diseases combined was malnutrition (29.7%) in 1990. By 2016, high Blood Pressure (15.3) replaced malnutrition from this dubious 'honour'.[3,22] Thus, serious diseases are prevalent in Punjab. There is also a train plying across state to Bikaner in Rajasthan for cheaper treatment in trust hospital there. The 'Cancer Express' continues to take cancer-affected people to Bikaner, Rajasthan, for cheaper and better care. It is noteworthy that the number of vacancies in public health system are increasing, while there is an evident reduction in number of Primary Health Centres (PHCs) from 484 in 2005 to 427 in 2015, as well as those functioning from government buildings (409) and rent free spaces (75) in 2005 to 383 and 44 respectively in 2015. The sub centres functioning from Panchayat or voluntary society building has

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also decreased from 1415 to 1122 during the same period.[22] On the contrary, private care centre which are at least five times more expensive than care in public health facility, have been established often with the state partnership.[5,23] There was no major increase in government owned health institutions in Punjab and beds in them since the 1990s.[5] Actually, existence of private sector owned health services in Punjab is not a new phenomenon. The public-private mix has been existing for a long period, where the latter makes full use of the former, particularly related to supplying trained health persons (Doctors, nurses, etc,) promoting health related Research & Development, and determining quality treatment standards.[25] More than one-third (38%) of households in Punjab have household heads who belong to a scheduled caste, 20 percent belong to other backward class and a very small proportion (0.1%) belong to scheduled tribe. In Punjab, 155 persons per 100,000 are estimated to have medically treated tuberculosis. About 1,699 women and 1,369 men age 15-49 per 100,000 have diabetes; and 1,271 women and 475 men per 100,000 suffer from asthma. The prevalence of any heart disease is more than twice as high among women (1,499 per 100,000) as among men (578 per 100,000).[6] A snapshot of selected diseases in Punjab is attempted as follows:

Prevalence of Tuberculosis

As evident from the NFHS 4 data, in Punjab, 155 persons per 100,000 are estimated to have medically treated tuberculosis. The prevalence of medically treated tuberculosis is higher among men (183) than among women (123) and is higher in urban areas (206) than rural areas (121). It is noteworthy that nearly all persons, 97% each of women and men have heard of tuberculosis, but even among those who have heard of tuberculosis, only 81-82 percent of women and men know that it is contagious and can spread through the air by coughing or sneezing. More than 96 percent persons know that tuberculosis can be cured (Table 1).

Table 1.Number of persons per 100,000 usual household residents suffering from any tuberculosis and medically treated tuberculosis by age, sex, and main type of cooking fuel, according to residence, Punjab, 2015-16

Number of persons per 100,000 suffering from			
Age and sex	**Tuber-culosis[1]**	**Medically treated tuberculosis[2]**	**Number of usual residents**
	Urban		
Sex			
Female	208	208	14,292
Male	205	205	16,114
Age			
<15	0	0	6,996
15-59	217	217	20,064
60 +	574	574	3,345
Cooking fuel			
Solid fuel[3]	534	534	3,007
Other fuel	170	170	27,398
Total	206	206	30,405
	Rural		
Sex			
Female	68	68	22,142
Male	174	169	24,429
Age			
<15	0	0	10,805
15-59	118	114	30,028
60 +	384	384	5,737
Cooking fuel			
Solid fuel[3]	165	165	24,841
Other fuel	75	70	21,730
Total	123	121	46,57
Total			
Sex			
Female	123	123	36,433
Male	186	183	40,542
Age			
<15	0	0	17,801
15-59	158	155	50,092
60 +	454	454	9,082
Cooking fuel			
Solid fuel[3]	205	205	27,848
Other fuel	128	126	49,128
Total	156	155	76,976

Source: IIPS and ICF (2017) National Family Health Survey (NFHS) 4 Punjab Report.

Note: [1]Includes medically treated tuberculosis, [2]Suffering from tuberculosis and received medical treatment cakes.

[3]Includes coal, lignite, charcoal, wood, straw/shrubs/grass, agricultural crop waste and dung.

In Punjab, 155 persons per 100,000 are estimated to have medically treated tuberculosis, based on reports from household respondents. The prevalence of medically treated tuberculosis is higher among men (183) than among women (123) and is higher in urban areas (206) than rural areas (121).

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Diabetes, Asthma, Goitre, Heart Disease, Cancer and Hypertension

As regards diabetes, asthma, goitre, heart disease and cancer, 1,699 women and 1,369 men age 15-49 per 100,000 have diabetes. Generally, 1,271 women and 475 men per 100,000 suffer from asthma. The prevalence of asthma among women is higher among older age groups, those who have less than 5 years of schooling and those who are widowed, divorced, separated, or deserted. Goitre or any other thyroid disorder is more common than asthma among women and less common among men (2,678 women per 100,000 and 191 men per 100,000). The prevalence of any heart disease is more than twice as high among women (1,499 per 100,000) as among men (578 per 100,000). Among all these diseases, cancer is the least common, with 117 women per 100,000 and none of the men reportedly suffering from cancer as evident from the NFHS 4 data.[6]

As regard hypertension, 15 per 100,000of women age 15-49 in Punjab suffer from it. The prevalence of hypertension among men age 15-49 is higher than in women. Twenty-three percent of men in Punjab have hypertension. It is higher in men who have less than five years of schooling, compared with those who have 12 or more years of schooling among women, hypertension decreases with increasing schooling (Table 2).

As regards the treatment seeking behaviour, variation is evident across social characteristics. While all persons aged less 20 year seek care for diabetes, treatment seeking for health diseases is 100% across all ages. Similarly treatment seeking increases with educational attainment except for diabetes in which case it is inversely related to education. While more Sc are reported to seek care for diabetes, more OBCs and other seek care for thyroid and heart disease. No clear pattern is evident in term of religious groups and wealth quintile (Table 3).

Similar pattern is evident among the men too. Men aged 40+ years, with at least high school level of education, and belonging to other backward classes have all sought treatment for diabetes, asthma and thyroid (Table 3).

Table 2.Prevalence of Diseases among Women by background characteristics (per 100,000)

Background Characteristics	Diabetes	Asthma	Thyroid	Heart Disease	Cancer	No of women
Age						
less then 20	4	12	3	7	0	2044
20-30	15	28	80	38	3	5231
30-40	57	63	178	73	7	4353
40+	182	90	147	110	7	3586
Highest Education						
Illiterate	2352	1646	2117	2038	235	2551
Primary	2372	2244	2372	2308	0	1560
Secondary	1626	1177	2839	1468	121	8241
High school	943	699	2864	664	35	2863
Place of Residence						
Urban	1842	1228	3435	1327	116	6027
Rural	1611	1295	2187	1611	120	9189
Caste						
SC	1719	1140	1974	1651	136	5877
OBC	1472	1238	2777	1204	134	2989
None of them	1800	1405	3284	1500	95	6334
Dont Know	0	0	0	0	0	5
Religion						
Hindu	1815	1137	2695	1228	110	5455
Muslim	0	1167	778	1556	0	257
Christen	1852	1389	2778	2315	0	216
Sikh	1673	1349	2687	1640	129	9267

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others	0	0	14286	0	0	21
Wealth Index						
Poorest		2597	0	0	0	77
Poorer	1075	2151	860	1505	215	465
Middle	1080	1140	1261	1200	180	1666
Richer	1626	1389	1833	1655	177	3383
Richest	1881	1195	3315	1507	83	9623

Source- IIPS and ICF (2017) National Family Health Survey (NFHS) 4 Punjab Report.

Table 3.Treatment Seeking Behaviour of Women and Men By Background Characteristics

Background Characteristics	Diabetes		Asthma		Thyroid		Heart Disease		Cancer	
	W	M	W	M	W	M	W	M	W	M
Age Group										
< 20	100	0.0	92	100.0	33	100	100	0.0	67	0.0
20-30	93	0.0	86	50.0	86	100	100	0.0	43	0.0
30-40	84	84.6	86	100.0	92	100	100	75.0	100	75.0
40+	93	100.0	88	100.0	97	100	100	63.6		63.6
Highest Education										
Illiterate	97	80.0	79	100.0	87	100	73	25.0	50	25.0
Primary	95	66.7	91	50.0	89	100	83	100.0		100.0
Secondary	90	80.8	88	100.0	94	100	83	60.0	80	60.0
High school	85	100.0	90	100.0	93	100	95	100.0	100	100.0
Place of Residence										
Urban	90.1	100.0	87.8	100	94.7	100	86.3	71.4	85.7	71.4
Rural	91.9	72.0	86.6	85.7	89.6	100	79.7	50.0	63.6	50.0
Caste Group										
SC	94.1	64.3	83.6	88.9	89.7	100	81.4	50.0	62.5	50.0
OBC	88.6	100.0	86.5	100.0	94.0	100	86.1	33.3	100.0	33.3
None of them	89.5	90.9	89.9	100.0	93.3	100	80.0	83.3	66.7	83.3
Don't Know	--	--	--	--	--	--	--	--	--	--
Religion										
Hindu	88.9	86.7	83.9	100.0	92.5	100	80.6	57.1	83.3	57.1
Muslim	--	--	100.0	100.0	100.0	100	75.0	50.0	--	50.0
Christian	100.0	--	66.7	--	100.0	100	80.0	0.0		0.0
Sikh	92.3	80.8	88.8	88.9	92.4	100	81.6	71.4	58.3	71.4
Other	--	--	--	--	66.7	100	--	57.1	--	--
Wealth Index										
Poorest	88.9	--	100	--	--	--	--	--	--	--
Poorer	100	--	60	100	100	100	85.7	33.3	66.7	33.3
Middle	100	50.0	78.9	100.0	76.2	100	70.0	57.1	66.7	57.1
Richer	90.9	66.7	87.2		85.5	100	76.8	71.4	75.0	71.4
Richest	90.6	90.3	89.6	75.0	94.7	100	85.5	--	--	--

Source: IIPS and ICF (2017) National Family Health Survey (NFHS) 4 Punjab Report.

Note: 'W' denotes Women; 'M' denotes Men.

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Why the Continued Disparity?

If the disparities continue despite the continuous efforts of the state, it is imperative to examine the alternatives. How are the efforts translated into programmatic initiatives comprising of services and resources which can be accessed by the vulnerable populations like the SC? People (policy makers, providers etc.) involved in the process of translation and their participation is extremely important. Whether participation of such people is perceived as routine work and therefore should be done mechanically without any sensitivity towards the population for whom it is meant; or participation to ensure with utmost sincerity that the programmatic initiatives reach the people for whom they are meant. Differential access results in varying bereavement. In case of neonatal and infant deaths information dissemination may be done by the grassroots level workers mechanically devoid of any concern for the people. This would entail no efforts for dissemination of the information and counselling. Service may be provided to fulfil the 'target' more than to enhance health.[25] In another situation, there can be adequate and timely dissemination followed by provisioning to the people who need and should be provided. This differential in rendering of services results in the experience of bereavement and sorrow which, therefore, differs from one social group to the other. Cooley's Theory of 'self' works towards creating specific 'self-image'.[10-11]

Impact of Changing Life Style on Different Diseases

Tobacco and Alcohol Use

As regards lifestyle habits, about 19 percent of men, but almost no women, age 15-49 use some form of tobacco. Men are much more likely to smoke bidis (9%) or cigarettes (8%) than to use other types of tobacco. The use of tobacco is slightly higher among rural men than urban men. Most men who smoke cigarettes or bidis smoked less than 10 cigarettes or bidis in the past 24 hours. Men are more likely to drink alcohol (34%) than to use tobacco. Among men who drink alcohol, almost two-thirds (63%) drink alcohol at least once a week. Positive association was found between the prevalence of health problem and smoking. Diabetes, asthma and heart disease is much high among the men who reported smoking. Similarly, the prevalence of diabetes and heart disease is high among people who reported drinking alcohol (Table 4).

As regards the source of health care the private health sector is the main source of health care for about seven in 10 households (73% of urban and 71% of rural households). Household members are much more likely to go to a private doctor or clinic (47%) than a private hospital (18%).

It is noteworthy that despite the emergence of a number of health insurance programmes and health schemes, only 21 percent of households in Punjab have any kind of health insurance that covers at least one member of the household. Health insurance coverage is almost same in urban (20%) and rural areas (22%). In Punjab, the State health insurance scheme predominates (62% of households), distantly followed by the Central Government Health Scheme (CGHS) and the Employees' State Insurance Scheme (ESIS). Only 9 percent of women and 15 percent of men age 15-49 years in Punjab are covered by any health scheme or health insurance. There are no urban-rural differences in the proportion of women and men who are covered by any health scheme or health insurance.

Table 4.Prevalence of Diseases among Men by Life Style Habits in Punjab

Background Characteristics	Diabetes	Asthma	Thyroid	Heart Disease	No of Men
Drinks alcohol					
Yes	2125	671	0	1119	894
No	1323	722	241	361	1663
Currently Smoking					
Yes	1277	2553	0	5532	235
No	1636	560	172	172	2323

Source: IIPS and ICF (2017) National Family Health Survey (NFHS) 4 Punjab Report.

The disease burden in the state has been increasing, while the public health has deteriorated. The number of Primary Health Centres (PHCs) in the state have remained stagnant at 484 from 1992 to 2007, and dropped to 427 between 2007 and 2015.[20-23] A government taskforce report in 2013[21] examined public health facilities in three districts-Fatehgarh Sahib, Mansa and Tarn Taran. It was revealed that about 26 per cent for the post of general doctors, 38 per cent for specialists and 31 per cent for nurses were lying vacant. The government's neglect of public health care, has given way to the emergence of private healthcare in the state. According to NSSO data, 70 per cent rural population in Punjab avails private healthcare, which is significantly higher than the national average of 58 per cent. The private sector has grown more in Punjab than in other states. A case of trauma costs Rs. 40,000 in public hospitals, but the same would cost Rs 2.15 lakh in a private hospital in the state.[23-24] In October 1995, under the health reforms system of the World Bank, the Punjab government established an autonomous Punjab Health Systems Corporation to bridge the gap between public and private healthcare. The World Bank gave the funding on the condition of "self-sufficiency". To achieve this, the corporation started charging from patients for services that would otherwise be

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free in government hospitals. Much of the growing disease burden was attributable to contamination of water, food and soil as well as lifestyle changes.[21,23,26]

Conclusion

Punjab has been agriculturally prosperous. The state exudes healthy image of its people. However, in the recent years, the state has been experiencing increase in severe and chronic diseases without a sound public health system. Studies have found that the health status in Punjab needs urgent attention. While the state had done well in reducing Maternal Mortality Rate (MMR) and Infant Mortality Ratio (IMR), it is struggling with diseases like hepatitis C, learning disabilities, cancer and reproductive disorder, high prevalence of cerebral palsy, arthritis, among others. Arthritis is reported by young people as early as in their twenties. Cancer is another disease which has inflicted the people of Punjab. Prevalence of medically treated tuberculosis is higher among men (183) than among women and in urban areas than rural. More women than men suffer from asthma. More SCs are reported to seek care for diabetes, more OBCs and other seek care for thyroid and heart disease. Despite the emergence of a number of health insurance programmes and health schemes, only 21 percent of households in Punjab have any kind of health insurance that covers at least one member of the household.

Private care centre are more expensive than public health facility. Most of them function with the state partnership. No clear pattern is evident in term of socio-religious groups and wealth quintile. The disease burden in the state has been increasing, while the public health has deteriorated.

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Conflict of Interest: None

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