
CHAPTER 21

Health Equity and Healthcare Equity—Eight Themes From an Island State

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1. CONCEPT OF EQUITY

Health equity and healthcare equity are concepts that individuals (on the basis of their socio-economic and cultural backgrounds) hold slightly varied notions about them. Healthcare providers, administrators, and policy makers potentially take numerous factors into consideration as to what constitutes as right in the provision of health equity and its subsequent attainment. What differentiates one stance from another is usually based on what they think equity in health should entail, and what they believe is a fair cost for society to pay to attain that equity. This chapter is based on the analysis of in-depth interviews with eleven healthcare administrators in Singapore. Their views need not be representative of the entire healthcare system in Singapore, but can provide valuable insights into the reasons behind a healthcare system's success. But first we need to provide definitions for health and healthcare equity.

Health equity is different from healthcare equity. The former deals with the status of health, whereas the latter refers to the provision of care towards achieving that health. Equity with respect to health or healthcare again is different from equality. Equality is an empirical measure, whereby health differences between individuals or populations are measured on a quantifiable basis across predetermined variables. On the other hand, equity is an ethical and a philosophical perspective and addresses questions such as *what*, *why*, and *how much*. It deals with justice of distribution. As such, equality is *empirical* and equity is *normative* [1]. Health equity deals with the chance that an individual gets to realize the full potential of his or her health. However, the full potential of an individual's health is affected by other factors such as geography, gender, environment, income, and age. Whereas individuals at times can choose their residence and income levels, they have no control over factors such as gender and age [2].

Healthcare equity addresses the access component to health and deals with the moral, ethical, and economic debate of ways to balance the factors that are outside an individual's control and yet impact the status of his or her health. There are two parts to healthcare equity—horizontal and vertical. Chang defines horizontal equity to mean that people with equal health needs should have equal access to healthcare [1]. Whereas, according to him, vertical equity refers to healthcare access taking into account the differences that already exist in terms of age, income, gender, and geography. For example, people with higher income have to pay proportionately more for the same access to healthcare. This is to counterbalance the differences in health status that exist between a higher earning individual and a lower earning one. This can also be interpreted as people with unequal health needs being provided with unequal care, so that all achieve equal health status [1].

The World Health Organization advocates an individual-based equity assessment model, as opposed to a population subgroup based one. Several authors [3–6] discuss health equity in the context of access to healthcare, efficiency of healthcare systems, and financing of healthcare delivery, whereas Musgrove considers these three and health equity to be equivalent concepts [7].

While attempting to identify the factors that bring about health inequity, researchers have cited differences in education levels [8], income [9], and occupation [10] as the main contributors. Whitehead argues that health status differentials as a result of self-destructive behavior in the presence of adequate information need not be associated with health inequity, and should only be considered as health inequality [11]. Davey et al. argue that socioeconomic differences can create health inequity amongst different races within the same country [12]. However, they add that other factors such as environment and lifestyle contribute too. In some developing countries there exists a gender

bias against women regarding access to healthcare and this leads to gender-based health inequity [13]. In rapidly developing nations, such as China, liberalization of the economy usually results in the widening of the equity gap between the rural and the urban population [14].

According to Rice and Smith [15] and van Doorslaer et al. [16], the available options of healthcare financing influences health equity. They argue that such financing options have an impact on income redistribution, which in turn affects health equity. Van Doorslaer et al. further state that the easy availability of *primary care*, in the form of basic health services, has a positive influence on an individual's assessment of his or her own health status [16].

Various approaches to addressing health inequities have been proposed. A need-based approach, that prioritizes healthcare provision according to those who need it most, has achieved mixed success [17, 18]. Pro-poor healthcare financing approaches through reorganizations at the community level have been discussed by Gilson et al. [19]. It has been shown that the rich are willing to contribute more than their own share to the healthcare financing programs at the community level in order to subsidize care for the poor [20]. However, individuals would prefer improved life expectancy for the disadvantaged, but not at the cost of reduced life expectancy for the rich [21].

Kinman suggests that health and healthcare equity related studies should also focus on the utilization of healthcare services, rather than just health outcomes [22]. Williams argues that in the evaluation of health equity outcome, expectations should be adjusted according to age, with a bias against those who have lived beyond “a fair innings” [23]. It has been demonstrated that policy makers might even be willing to pay a limited premium, in terms of preventable deaths, for establishing health equity [24]. Gissler et al. mention that different sensitivities have to be taken into account when measuring the health equity status of specific population sub-groups such as children [25].

2. THE SINGAPORE HEALTHCARE SYSTEM

2.1. Tale of a City

Both the public and the private sectors provide healthcare in Singapore. The private sector provides 80% of primary care and 20% of tertiary care. Primary care, for the purpose of this chapter, is defined as the basic care that is provided to patients for non-serious disease conditions. Tertiary care is the care provided to patients with complex disease conditions requiring practitioners with specialized clinical knowledge. Theoretically, a patient could go to a primary care setting upon disease manifestation, and then be referred to a tertiary care center for treatment and care. Follow-up care could be done by the primary care setup.

In Singapore, under the public healthcare system, there are two types of patients—private and subsidized. Subsidies range between 20%–80% of the total bill size depending on whether the patients have been admitted to four-bed ward rooms [26]. The financing philosophy involves patients having a co-pay as part of their healthcare expenditures and cost differentiation on the basis of services demanded. In 2005, Singapore spent 3.7% of its GDP on healthcare, which is a fraction of what most of the other developed countries spend. Yet Singapore matches up very well regarding the standard health and healthcare indicators such as life expectancy, infant mortality rate, hospital beds-to-population ratio, and doctors-to-population ratio. This makes it a remarkable healthcare success story [27].

2.2. Great Expectations

Access and affordability are two key aspects of all healthcare systems, and they are linked. Lack of access could be due to the structural deficiencies, such as the non-availability of medical facilities, doctors, or medical equipment. Lack of access could also be due to a lack of affordability, which in turn could again be caused by a myriad of factors such as low levels of income, lack of insurance, morbidities, and unavoidable delays in getting care.

The Singapore healthcare system faces unique challenges and distinct advantages. With a stable government and consistent economic growth, healthcare access problems due to structural deficiencies would not be the main concern for the time being. Since it's a city-state, access problems due to geographical distances would not be a worry either. Yet with limited natural resources, a heterogeneous population base and an aging population (like some of the other developed nations), Singapore has its own set of challenges. Its success with healthcare provision, in spite of these challenges and the fact that it is a relatively young state, provides a unique opportunity to delve deeper into the rationalization and prioritization that is undertaken by the Singaporean healthcare managers and administrators for the allocation of the state's healthcare resources.

Furthermore, a review of some of the existing literature on health and healthcare equity suggests that the focus has been almost entirely patient-centric. It is to be expected that patients as consumers of healthcare receive their due attention. But because they are neither pawns nor queens of the system [28, 29], it is important to also get an insight into the motivations and the thinking of healthcare providers regarding the matter [29]. This study aims to develop an understanding of health and healthcare equity as perceived by Singaporean healthcare administrators.

2.3. Going About It

In-depth interviews were conducted to better understand the perception of health and healthcare equity among healthcare professionals in Singapore. The objective was to analyze the motivations of healthcare administrators when faced with resource allocation decisions. As providers they are at the point of contact where the care is either formulated or delivered, and they can have a panoramic view of the disease and health of the population at large.

The Singaporean healthcare system is divided into two clusters, with each cluster comprising a few tertiary-care hospitals, polyclinics, and specialized care centers. In total, eleven healthcare administrators from one cluster were interviewed; however, some of them had spent a significant number of years working in hospitals belonging to the other cluster. The interviewees were a mix of clinicians and non-clinicians. Of the clinician-administrators, some were still in active clinical practice. The healthcare-related work experience of the interviewees ranged from a year to over three decades, with the median being around eight years. The majority of those interviewed (82%) were males. The interviewees were carefully selected to ensure that they have had considerable and diverse work-related decision making experiences. The group included senior administrators and policy makers, and had members belonging to four different nationalities with a combined experience of having lived or worked in at least six different countries.

During the in-depth interviews, we consciously focused on the 'depth' part as described by Woodward et al. [30], and the interviews were conducted in a manner so as to facilitate further analysis of not just what was being said, but the motives, experiences, and beliefs behind those words. The interviews were semi-structured and adaptive in nature, and the questions were broad based and depended on the direction in which the particular interview was progressing. Varying degrees of ego-threat and trauma, as Gorden [31] has discussed, in terms of doubting the motives for interviewing and in altering their own value judgments, were obvious among the interviewees.

The interviews also aimed to identify central themes that influenced ideas and opinions related to health and healthcare equity. The alternative proposition would be that ideologies regarding equity are too fractious and there are no zero-sum games up for grasp.

3. HEALTHCARE THEMES: FINDINGS, ANALYSIS, AND PERCEPTIONS

Provided in this section are statements of healthcare administrators on various aspects of health equity and healthcare equity categorized according to their thematic emphasis.

Following them are our derived perceptions. It emerged that there weren't any decisive central themes. Rooted in altruism, they were also often real. Sieving through the information, we found some of our previous ideas being corroborated, while some fresh insights also emerged.

3.1. Do Patients Just Seek to Maximize Their Own Benefits?

Administrators: *“Some people misuse the system just because Medishield pays (for it).”*
“I think when it comes to illness, things are assessed, you are re-assured, what you are complaining about is going to be cured. I think that is human nature (to seek assurance from the provider).”

Our Analysis and Perception: It might not be unreasonable to expect that patients will not care about the welfare of others among the general patient population. It could happen, in a limited sense for example, if they were to share the same ward room in a hospital setup. But it is safe to assume that such camaraderie might not be a feature with large-scale issues, such as healthcare costs and socio-health sustainability. Should this be sufficient cause for interviewees to doubt patient's motives and attitudes. A concern could be that patients just seek to maximize their own benefits or satiate their own healthcare needs, and as such, would want to stay in hospitals as long as they have insurance and do not have to pay out of pocket.

Ideally, providers should be able to adjust the allocation of resources exactly according to the needs of a patient, but should the burden be left to the care providers alone? If things go wrong, as they sometimes do in healthcare, the concerned caregivers would have to live with the guilt of having denied care (albeit based on their best clinical judgment) to somebody who wanted it. The onus could be put on society itself to decide on the allocative efficiency of healthcare resources, and society could go about doing so through policies and such. Should it then be left for society to decide what in fact is a very private matter. This then brings us to 'care differentiation,' that is the bifurcation of care delivery, into patient needs and patient demands.

3.2. Should the Segmentation of Healthcare Be Based on the Needs of Patients or on the Demands of Patients?

Administrator: *“The challenge is actually of information. I think it is quite safe to say that healthcare demands will always be greater than healthcare needs. For the underlying premise of our system to work well, it is necessary that needs are accurately defined and that they are addressed. Demands in the form of frills can then be managed through better service and so on.”*

Our Analysis and Perceptions: How does one differentiate needs from demands? to emphasize the extent of healthcare delivery that should be adjudicated as absolutely essential, there is a real chance of associating basic healthcare needs to catastrophic origins, such as accidents. However patient needs are subjective, and depend on individuals' expectation about their own and others' health status. Healthcare needs might even form part of a social contract, and could be kept outside the purview of regulation by market forces. But that would likely be an extreme proposition (successfully implemented in some nations such as Cuba), and making it sustainable in the long run could be a challenge. A more pragmatic approach might be to let the public sector address the social contract part, and let the private sector concentrate on the demand element of healthcare on the principles of market forces. This would be tantamount to segmenting healthcare into provision (responsibility of the provider) and purchase (patients' responsibility). The provision part could then be distributed among the public and private sectors on the basis of the behavior of the purchase segment. This would be one way to ensure that the equity debate focus only on the need element of health and healthcare and not the demand part.

3.3. Consumers as Rooks—Not Queen, Nor Pawn

Administrator: *“I think you have to look at it from two aspects, healthcare as a right and healthcare as a commodity. I think healthcare is a right. Most people would agree on that. The question would be to actually determine to what level of healthcare should be provided as a right to citizens and to what level should it be distributed as a commodity. I think you do not want a moral hazard where everyone goes to a parking lot and you tell them ‘you can have any car you want, here is the key... go ahead.’ Everyone is going to choose the Ferrari.”*

Our Analysis and Perceptions: As discussed earlier, healthcare needs of individuals (as opposed to just healthcare demands) could be unrealistic and that there is a case for rationing healthcare services that are provided to meet patients’ needs. Accompanying this is the assumption that the total available resources are less than what it would take to satisfy all needs. Does that make a case for the rationing of needs, as opposed to attempts at conservation and realignment of resources? This is probably akin to saying that the consumer side should be affected, and changed, but not that of the healthcare provider. This gives an impression of a *consumer as pawn* scenario.

However, depending on whether the healthcare system that we are talking about is public or private, this will vary. This necessity for rationing healthcare needs might be a testament to expectations that public health delivery should be in adherence to a social contract, rather than be market-force driven. Herein lies the dilemma of healthcare policy makers, that public healthcare should be for the people and should satisfy their healthcare needs, yet at the expense of some of their constraints. Rationing health services makes it difficult for policy makers since they have to conduct risk stratifications, which could be considered as moving away from the ‘social contract.’

3.4. Is There a Need for Private Healthcare?

Administrator: *“If you want so-called concierge level service where people serve you and make sure that the staff ratio is one on one, then you have to go to private hospitals, of course you have to pay more for it.”*

Our Analysis and Perceptions: Patients in the context of Singapore could be considered as belonging to three different groups—private patients within the public system, subsidized patients with the public system, and patients who go to the private healthcare system. An insight into whether there is a need for role definition and differentiation among private and public healthcare could prove to be important. Should private healthcare be viewed as complementary to public healthcare, whereby it helps in better distribution of the patient load by catering to specific patient niches? This could potentially create a wrong estimate of the health needs of Singaporean residents. The concept that people who want frills along with their healthcare need should avail the non-subsidized care provided by the public healthcare system, and others could get the subsidized care provided by the public system, leaves a biased role for the private healthcare system with regards to tertiary care.

One way of looking at private healthcare is that the rich, who demand more care than what is necessary (specifically in terms of amenities and comfort), could be catered to through a system that is ready to provide for such needs. Such consumption could be looked upon as no different from the consumption of luxury items such as cars. The argument that keeping a financial focus on healthcare consumption would lead to resource wastage, could be countered with the fact that such market segmentation would in fact enable the provision of care to the poor and would contribute to overall societal health-wealth. However, the caveat is that the care differentiation should only involve the extra amenities and comfort demanded by the patients and not that portion of care which is a necessity.

3.5. Unpredictable Nature of Disease—A Challenge for Healthcare Resource Allocation Planning

Administrator: *“As regards to the allocation of healthcare resources to cater to an individual’s needs (or disease status), it could be difficult to do so. This is because I think most of the time, you would not have the time or the space or the opportunity to decide beforehand what your prognosis would be.”*

Our Analysis and Perceptions: Disease occurrence and its progression are difficult to determine. Hence, pre-allocation of healthcare resources is a challenge at an individual level. At an aggregate level, pre-allocation of resources might be possible, but then its success only implies that society’s healthcare needs are met. It does not ensure that at an individual level healthcare equity is attained. This is because health or disease at the individual level is not uniform.

Even leaving out the demand side of healthcare allocation and focusing just on the needs, people require different amounts of healthcare depending on their individual health profiles. So if different amounts of resources are being spent on separate individuals, and high-risk lifestyles and such are discounted, then it could be argued as to whether it does reflect healthcare equity. Regarding healthcare outcomes maybe equity is achieved, but not necessarily regarding healthcare provision. The unpredictable nature of disease definitely poses a challenge for proper healthcare resource allocation planning, but this need not necessarily impede the pursuit of health and healthcare equity.

3.6. Social Contract and Economic Realities

Administrator: *“There is a social contract between society and the individual, as with your pay, your taxes and everything. I think the government’s role is to provide basic healthcare guide safety net, taking into account appreciation and everything. There should be a basic level that’s provided. You asked me about what should be the government’s role. No one else has the capability or should be given the responsibility.”*

Our Analysis and Perceptions: Provision of healthcare could be considered both a “commodity and a right.” However, provision could also be tied down to an individual’s ability to pay; in other words, what one pays for determines what he or she gets. However, the modalities of delineating between the commodity and rights aspects of healthcare provision could be confusing. It is possible to have a band or rather a threshold of healthcare services to be considered as a “social contract,” which society owes to the individual. But then who gets to decide the threshold—the provider or the patient?

Society could be entrusted to decide whether healthcare resource allocation should be universally equal, or proportionate on the basis of age, sex, or history. Unlike patients and providers, social decision makers (for most developed nations, it would be the polity) are in a position to see disease as it affects society and not just individual selves. The cause and progression of disease could vary from one person to another. However, even at an individual patient level, it is not easy to determine the exact level of healthcare, where needs end and demands begin.

3.7. Artificial Equities—Use of Healthcare Resources in Relation to One’s Socio-Economic Status

Administrator: *“I have a friend who is a CEO ...and she says, ‘I keep on receiving these benefits and all, etc. ... no need to buy, everything is provided.’”*

Our Analysis and Perceptions: Some forms of existing benefits could actually be detrimental to society’s best interests. It might come from the association that an individual using a less expensive resource than that dictated by his or her social status is in effect harming society, probably because in a holistic sense some other candidates more in need of it is being denied.

Not only that, but if an individual has to pay less for gaining lesser utility, the earnings of the provider are also less. However, what does not seem so obvious at first is that

resources are also being saved. As an example, let us consider a rich patient, who could otherwise afford amenities X and Y, only chooses to use X. He or she is billed for X only, and not both X and Y. For example, a patient who can afford to pay for an air-conditioned room during his or her hospital stay might simply choose not to do so in order to save money. Although as a result of his or her using lesser or cheaper resources, the system earns less, it is also true that some resources (in this case Y) are being saved. In effect, this saving of resources might mean less earnings for the healthcare system, but not necessarily a setback with regards to the provisioning of care to patients.

3.8. Should Healthcare Resource Allocation Take into Account the Grim Past of an Individual Member of Society?

Administrator: *“I think everything goes back to the fundamental philosophy as to what does society value. For example, if I am a Singaporean, do I become a lesser Singaporean if I lead a riskier lifestyle? It cannot be. Just like my gender or color, it should not make any difference. We are a part of the same civilization.”*

Our Analysis and Perceptions: A moral conundrum with healthcare equity, involves the question of whether someone who leads a riskier lifestyle should be allocated lesser healthcare resources. When deciding between allocation of resources, should it be taken into consideration whether a patient has led a risky lifestyle and has done little self-preservation, and thus has less rights to healthcare resources? If broken down into action-consequence phases, should patients face the consequences of their actions, just as individuals have to with other aspects of social living? But it is remarkable that irrespective of the cooperation or negligence of patients during the action phase, the healthcare-administrator interviewees felt that there should be no differentiation during the consequence phase.

Even if we agree that treatment should be equal, irrespective of past activities or risks undertaken, is it because we are simply adhering to the principles of social justice, or simply because the course of a disease process is indeterminate and difficult to predict? Either way should the principles of distributive justice be sacrificed in order to achieve social justice? It seems that there is a difference in attitude towards health and healthcare equity depending on whether the individual has had prior medical training. Doctors contend that it is impossible to develop healthcare systems where inequities do not exist at all. This probably stems from their clinical experience where patients with identical disease conditions show a difference in prognosis and treatment outcomes. Hence the goal to attain equal health status, for society in general, might be inappropriate and a misnomer in itself.

Non-doctors might be more optimistic about eliminating all health and healthcare related inequities due to the fact that they tend to view equity only from a financial and access point of view, and not from an outcome perspective. An important factor could be related to the point in an individual patient’s journey when inequity issues need to be addressed. The redress of inequity issues could be restricted to the care delivery and the disease episode phases, or it could be looked into from the access and financing point of view. The challenge then becomes that once we talk about care delivery, disease episode, and treatment outcomes, then we are discussing health and healthcare equality as opposed to equity. However, achievement of equality in the domain of health could be an essential step towards achieving equity.

It could also be argued that there is an association between rationing needs, and the conservation and realignment of resources. It’s probably akin to saying that sacrificing some individual patient satisfaction could actually be beneficial to society as a whole. Strangely, this gives an impression of a *consumer as pawn* scenario. However, this perceived necessity for rationing healthcare needs might also be a testament to their expectation that public health delivery could be a testament to the adherence to a social contract, as opposed to having a healthcare system that is completely market force drive. Herein lies the dilemma, that public healthcare should be for the people and should satisfy their healthcare needs, yet at the expense of some of their needs. This dilemma is obvious when one realizes

that rationing health services might need risk stratification of patients and that could be considered as moving away from the ‘social contract’ of providing healthcare to all those in need of it. Even if it is possible to distinguish between healthcare needs and healthcare demands (if not by patients, then at least by experienced professionals), it is the specter that sometimes even needs have to be addressed through rationing is what makes healthcare resource allocation a difficult proposition.

4. CONCLUDING REMARKS

The need to differentiate between healthcare needs and healthcare demands is an important theme. Without this differentiation, it is impossible to chart an optimal resource allocation pathway. Furthermore, the bifurcation into needs and demands allows greater flexibility in terms of healthcare pricing. But it needs to be remembered that since there are at least two parties to it—the provider and the patient—this flexibility in terms of healthcare pricing might lead to an imbalance in favor of the provider. Furthermore, it seems that attaining an optimal definition for healthcare need seems to be a difficult concept. Among those interviewed, even administrators with clinical training did not suggest any criteria for the determination of healthcare needs.

The interviewees seemed to also agree with Wagstaff et al. [32] about the financing of healthcare based on the ability to pay. However, healthcare financing on the basis of one’s ability to pay should only focus on that demand element of care which is over and above the need part. Basically, health care providers should be willing to provide frills and extra comfort to patients (provided they have the resources and are not denying a more deserving but lesser paying patient), and could even treat the transaction on market mechanism ethos. The need to impose a ceiling would depend on the availability of resources.

Some of the interviewed administrators felt that the rich can afford higher levels of healthcare services and pay accordingly for them. This extra revenue thus generated should then help subsidize the care for those who cannot afford even the basic healthcare services that they are in need of. There was also a general consensus that age and past behavior should not be a factor in equity related decisions. These views were similar to those put forth by earlier researchers [20, 23, 24].

The interviewed administrators also felt that

- (i) individuals should take care of the small bills and government could then pay for the larger bills,
- (ii) the availability of comforts and frills depends on an individual’s ability to pay,
- (iii) surplus of resources is preferable even if it calls for restrained and responsible distribution, and
- (iv) co-payment of healthcare bills makes individuals more responsible towards their health.

Perceptions of health equity and healthcare equity are relative concepts. It might not be possible to have an accurate, yet universal definition of the two. The demographic mix of the society and the performance of other socio-economic indicators play an important role on how they are perceived. Both the perception and priority of the concepts are dependent on the particular society in question.

Based on our interpretation of the discussions with the administrators we recommend that in order to attain health equity and healthcare equity, policy makers and administrators focus on

- (a) segmenting the provision of care between the needs and demands of patients and ensure that the healthcare needs of all individuals are met,
- (b) realizing that healthcare is both a right and a commodity, and hence market mechanisms for resource allocation and distribution need not always be the most efficient, and

- (c) understanding the roles of the different stakeholders of the healthcare system and capitalizing on the synergies present to attain a good-for-all and sustainable equilibrium.

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