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Michele Battle-Fisher

Equitas Health Institute, michelebattlefisher@equitashealth.com

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Health Inequality as a Socially Created Complex System

Michele Battle-Fisher
Equitas Health Institute

INTRODUCTION

“There are things that powerful, advantaged social groups are willing to do, or at least let happen, to members of other less powerful, less advantaged social groups that they would not be willing to do or let happen to members of their own social group.” (Powers & Faden, 2019).

Health inequality is a socially created complex system. Health inequalities are dependent upon interdependent social and physical systems that create and perpetuate inequalities, which in turn lead to health disparities. Communities have historically been dealt with social disadvantages that are largely disregarded and buttress the status quo. There is little space remaining for discussions of fairness when a marginalized community is deemed inconsequential by a society bolstered and benefitting from an imbalanced social system.

Social construction bolsters senses of superiority and supports construction of advantage that is only bestowed on those with power and privilege. The system supporting disparity has questionable sustainability to remain at a desired steady state or equilibrium. Disparities are resilient as society inputs energy which fuel the growth and maintenance of the social systems that propagate disparity. Disparities should in theory be temporary phenomena in the sense that they change society through betterment from one state to another. But society is unique as it has both temporary while simultaneously permanent as the continued existence of disparities necessitates those temporary changes in the first place. Marginalization would not exist without a system on which it thrives. Why must this present system of disadvantage change from its current state to become one that is even more disadvantaged?

“The flaw of a principle-based paradigm is that very judgment (made by Eurocentric bioethics). The application of the principles will be subject to other values held by the society. In a racist society (such as ours), the judgment is often exercised in a racist manner.” (Randall, 1996).

WHAT OF PRINCIPLISM AND DISPARITY?

This situation of marginalization leads to a connection on public health. According to Klugman (2007), the ethics of health is commonly centered on four tenets- efficacy, solidarity, dignity and integrity. Klugman’s recapitulation of principlism requires both an observance and reaction to the existence of “common citizenship”. But what occurs when groups that have been historically shut out of the empowered collective of “common citizenship”? I argue that the benefit of being legitimized as a part of the common citizenship is inexplicably linked to social power and influence. Citizenship cannot be common if certain segments of society are absent. The invisibility of marginalization within medical ethics cuts through the argument that justice is being fully advanced by the discipline.

In terms of Klugman’s application of principlism to public health ethics, its application is reliant on the common interest and fair access to deliberation of principled morality. In terms of disparity, morality cannot be universally applied if certain segments of society lack power. According to Klugman (2007) paying homage to the work of Mann (1997), moral deliberation is hierarchical, at the collective and individual. This can only be true if ethics are accepted as being deliberated beyond the binary of community and individual. For as society is complex so be its citizens. The complexity of justice, better yet, injustice highlights the hypothesis that principlism is insufficient on its own to tackle health disparity. Therefore, a critical, systemic approach to principlism and presupposes those real-world ethical problems such as distributive justice can be tackled based on the following assumptions:

1. Ethics are not unlike social structures, as they can be understood as dynamic over time.
2. The systemic “how” and “why” of ethics are as important as the static “what” of ethical positions.

3. The complexity of morality is not the same as parsing out and examining individual ethical situations.
4. Due to its social construction, ethics have degrees of variation both at the public and private levels.
5. Disruption within an unjust system requires attending to moral complexity as it is, not as we surmise or wish to be.
6. Unjust society begets unjust ethical action (and inaction).
7. Ethics as we know it only includes people that are disenfranchised if those allowed into the deliberation. Otherwise, those in power hold the key to what we accept as ethical, principled discourse.

This author does not see the discussion of ethics without a simultaneous discussion of principles that accounts for cultural specificity. Nevertheless, the overriding principle held by whom? We know the answer. The principle was agreed upon by those unwilling to imbue culpability for the complex history of racism and disenfranchisement that plagues the health of populations of color.

“(Health disparities) may have remained difficult to answer (questions about etiology and policy) in part because they involve the types of dynamic progresses that characterize systems and because most existing work has been based on approaches that largely ignore these dynamics.” (Diez Roux, 2011)

EMBRACE THE COMPLEXITY

Silva and colleagues (2018) propose that ethical problems, particularly if posed for marginalized populations, should be framed as complex systems and as more than metaphor. They further acknowledge that “if an ethics for public health approaches complex population health challenges as a set of simpler causal parts to each be considered and addressed in turn, then it will fail to take seriously the complexity of such challenges” (Silva, Smith, & Norman, 2018). Complex systems possess unique compositions of interdependent elements that are subject to emergence and adaptation over time. According to Gatzweiler et. al. (2017), in order to investigate health as complex, adaptive systems, in order to do so properly, we must:

1. Unravel cause and effects that are dynamic and numerous.
2. Understand the drivers that push and pull the system that supports change.

Additionally, a complex system that is constantly adapting is acting on its nature awash with internal and external energies, which sustain it. Energy is not always positive, but it is the source of a mechanized sustenance that propels in the direction that it is taking. Energy simply is. People affix meaning to those adapting forces. These energies are mechanical in terms of ability to change however; the social construction of causal effect is what we have come to know as disparity. With systemic diversity comes a rate of change in the multidimensionality of justice. Justice is tied to a “past path” that injustice existed and follows a road from which it created (Forrester, 2007).

As effects alter the social elements that make up marginalization, we seek out a single strategy to achieve a steady state (equilibrium) that suits society as what is acceptable as a success. I argue that success in this situation is often not full eradication of disparity, as society never truly balances toward equity over the long term. Goal setting of reversing disparity is not analogous to approaching disparity in its circular nature. As a system’s effects are more apparent over the long term, short-term goal setting may offer a false sense of accomplishment if the societal change is not durable. Disparity is sustained due to forces of a social “system” that in themselves bear no judgment. Judgment lies squarely on a society that feeds this persistent “system” that must be judged.

LEVERAGING THE SUB/SUPRASYSTEMS

In complexity, there are organizational levels of systems. First, there is the system. Within the systems, there are subsystems that constitute the individual elements of the system. Those elements might include income, employment, safety, safe external environment, and safe housing. Suboptimizing one element and concentrating its causal effect is prone to error that acts against

holistic, sustainable change. This is not to say that one leverage point could not be found that makes a small shift toward big change (Meadows, 1999). Nevertheless, what if that big change is detrimental and sends us down an even more unethical path? This is quite possible. As systems react and sustain themselves, based on inputs from the internal and external environments, where do we as bioethicists start when the static approach feels more natural? Begin with an understanding that the broad universe of social structure begins but does not end with social components. Holism is not the same as a broad perspective. We must become attuned to and not shy away from the ethical and social chaos ensued by complex social structures, not merely the complexity of philosophical arguments.

Suprasystems are macro level composites of overlapping subsystems. The global suprasystem is the level that is most effective to allocate targeted effort. Social inquiry often is employed at the subsystem level though we intend to intervene at the suprasystem via subsystems. Further, we more readily recognize these subsystems, or the individual elements of a system and attempt to suboptimize one part, such as income, to the detriment of the system. I am not saying that improving the income status of the marginalized is not a worthy goal. We might now gain systemic change if other factors driving the system are not tackled as well.

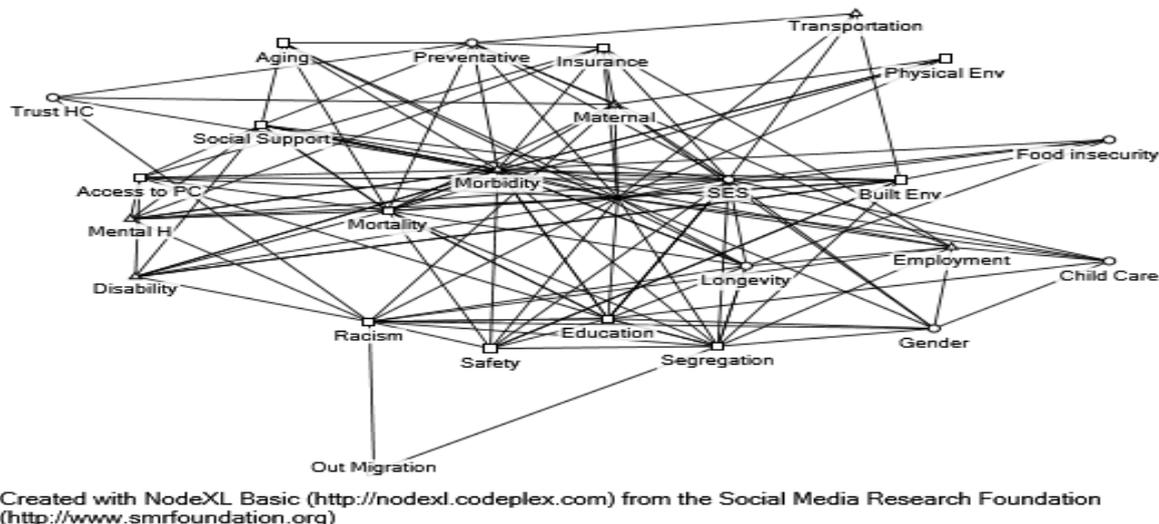


Figure 1. Representative web of social determinants of health for marginalized populations

Goldberg (2020) noted that social disadvantage is linked to complex factors, which is “not a deficiency of the theory, nor does social causality need to be understood in linear, unidirectional pathways”. As this model (Figure 1) illustrates, complexity of health outcomes lies in the ties that cross and interweave at the subsystem, resting on diminished social capital and entrenched negative outcomes. The error of suboptimization, where one element is optimized to the detriment of the system, is understandable because so much is at stake in terms of improving population health at the suprasystem level. Bioethics must recognize in our work that a moral society is not one where we can make a pronouncement that we leverage one circle, square or triangle without accounting for the reverberation across and among these connections.

In terms of supervenience, does not income disparity relate to food insecurity? Unfortunately, social determinants thrive symbiotically. According to Kaplan et. al. (2017), to fully understand a person’s health status there must be a recognition of multilevel and multiscale systems and subsystems that are “tightly interrelated and causally tangled”. Due to changes in scale and dynamics of these very determinant public health targets, bioethics should focus exploration of the dilemma on patterned, adaptive nature of inequality and racism.

DISCUSSION

"An exploration of the meanings of dignity and the forms of its violation—and the impact on physical, mental, and social wellbeing—may help uncover a new universe of human suffering, for which the biomedical language may be inapt and even inept." (Mann, 1997).

This author supports Mann's statement. A "black box" of societal factors that are linked to social disadvantage describes Mann's description of the socioeconomic status-health gradient. However, this gradient only speaks to the magnitude of change, not the dynamism brought about by change. The whole of social disadvantage would take on a form that becomes not recognizable from its parts of the system. Supervenience, where one element is directly dependent on other elements, is illustrated by the interweaving of social factors that are related to suboptimal health outcomes from historically disadvantaged populations. A complex system that is constantly adapting is acting on its nature to propel with the energy needed to sustain itself. However ethical, marginalization is not innate and unavoidable. A system of inequality is one where multiple elements such as racism, unfair policy, and income inequality adapt and react within elemental patterns. This need not be the case.

Present moral society is obstructed by a semipermeable kind of social osmosis, one that is unequally permeable to disadvantage and is less apt to allow social capital to those who require it. Public health builds the goal posts to reduce disparity based on epidemiological and intervention findings that discover populations that are often homophilous in composition in the first place. This knowledge has its place and is fundamental to the quest to reverse negative health outcomes over the life course. We as bioethicists who pledge the normative effect of morality on society must publicly declare unequivocally that marginalization in any form is immoral. We must become unapologetically critical when reflecting and debating marginalization and social disparity.

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