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Social determinants of health in biocultural research: a review of evidence

Social determinants of health

The social determinants of health are the non-medical factors that influence health outcomes. As an analytical framework explaining how poor health is caused, social determinants of health theory has been quite successful eventually becoming the main overarching approach to explain health inequalities (Lundberg, 2020). Advocated by the World Health Organization, this approach recognizes the social factors as major drivers of uneven distribution of health and disease in a society and seeks to explore the specific ways in which each of social determinants (i.e., income, education, social support, employment, housing, access to health care services etc.) contributes to the extant disparities in health.

The onset and progression of poor health involves a complex and multifactorial process of causation. The accessibility for analysis of the influences that lead to development of illness varies; the implications of this gradation in causal visibility and clarity of the mechanism can be illustrated in a following set of examples. Consider damage from physical trauma, infections disease and non-communicable/chronic conditions. While the physical damage resulting from accidents is obvious in terms of both its mechanics and implicated agents of impact, it becomes less so in cases of microbial agents and similar pathogens where their work and impact are more unobtrusive. It becomes even more difficult to register in the case of non-communicable diseases where the process is attributable to more than one risk factor and the mechanisms of their action are not fully understood despite the knowledge of the many among the likely participating factors. In addition, many particular risk factors are not disease specific, but rather increase the risk for a range of different no-communicable diseases (Lundberg, 2020: p. 474).

However, the process by which the social factors affect health is not identical to any of those three types of mechanisms discussed previously. The social determinants of health do not represent singular isolated causes of disease in a manner one could think

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of a pathogen's ability to generate illness or a sharp object's proclivity to leave flesh wounds upon approach. The social determinants of health approach stresses the patterned nature of emergence, clustering and maintenance of health risks across different social groups, and their systematically uneven distribution within a society. In that vein, rather than attributing to social determinant of health the capacity to precipitate the launch of a causal chain leading to deterioration of health, the issue of social determinants of health actually attracts attention to the fact of concentration of causes of poor health and risks of exposure to them in a specific social group compared to others. That makes them less the 'cause of causes' (which undermines their deterministic nature) but more likely the 'risk of incurring more risks' (Phelan, Link, Diez-Roux, Kawachi, & Levin, 2004). If analyzed more in-depth, the uneven distribution of health risks within the population gives rise to inequalities in health risks, inequalities in vulnerability to risks of disease, and inequalities in the consequences of poor health (Lundberg, 2020: p. 474).

When building theoretical models of causation or communicating the results of epidemiological research on social factors in health, careful steps should be taken to avoid reductionism, on the one hand, and determinism, on the other. As already mentioned, the attribution of deterministic powers inherent in calling something a determinant, introduces a flavor of high probability of cause and consequence in terms of health outcomes. However, in the case of the social determinants of health the observed population-level regularities do not readily translate into individual-level prognosis. The interplay between the structural social factors ('upstream factors') and human agency individual factors ('downstream factors') limits the deterministic properties of social factors, where it can mostly be observed in central tendencies but not uniformly in individual cases or change in individual behavior (Lundberg, 2020: p. 475–476; Øversveen, Rydland, Bambra, & Eikemo, 2017). Individual differences also play a significant role. Furthermore, the wide range not only of social determinants themselves, including the condition of intersectionality, but also of social groups and vulnerable groups that makes accounting for health disparity a highly complex task.

Theories of health inequalities span several different approaches highlighting distinct factors influencing health risks, including materialist (e.g., based on income and differential access to resources), psychosocial (e.g., emphasizing emotional reactions and feelings associated with experiences of inequalities), cultural-behavioral (e.g., linking routines, cultivated preferences and habits to health) and life-course (e.g., connecting timing and chronology of exposure to hardships) perspectives (Øversveen, Rydland, Bambra, & Eikemo, 2017). A separate perspective, the Fundamental cause theory, generalizes the essential features of health inequalities across a wide range of health outcomes (Phelan, Link, & Tehranifar, 2010). This paper reviews the approach to social determinants of health within the critical biocultural framework. Socioeconomic status (SES) being by far the most influential among the social determinants of health; its interactions with culture will be reviewed in a separate rubric. The distinction between the impact of subjective and objective SES on health is also a subject worthy of in-depth exploration, considering the evidence of higher impact on health outcomes of perceived social position over the actual one (Cundiff & Matthews, 2017).

Biocultural research on stress and health

Some of the challenges the social scientists are facing include understanding, measuring, and explaining the effects of culture on human condition. Culture is a central anthropological concept, but its properties are widely explored outside of anthropology. While the effects of culture in cognition, emotion, behavior, and health are not disputed, the casual relationships between them and their specific mechanisms are not clearly understood. Within different social sciences the researchers address the role of cultural factors in various forms of social organization affecting human condition, e.g., healthcare systems, economic development, education standards and schooling, forms of marriage and romantic love, bureaucracy, legal institutions, birth control, childbirth, parenting etc. Influential research directions such as culture and cognition have blossomed over the past decades to produce a number of intellectual schools and specialized research niches (distributed cognition, cultural models, culture and personality etc.) exploring the role of cultural factors in thinking and feeling as well as behaving. More recently, and partly as a response to the challenges of COVID-19 pandemic, the empirical research has advanced a number of important questions as part of the inquiry into the nature of interactions between the social and the biological (Murray et al., 2023; Schattuck & Muehlenbein, 2020). One of the most interesting and prolific research avenues within the biocultural approach involves learning about the impact of sociocultural factors on health and embedding of social information in human physiology by means of generating stress. This research niche showcases systematic evidence that health, disease, and longevity are anything but impervious to cultural influences. The body of knowledge it has generated invites to move anthropological reflection in several directions. On the one hand, it offers new knowledge about the role of cultural factors play as chronic stressors and the routes by which this socially generated stress can get "under our skin". On the other hand, it points to the elements inherent in social structure of different societies (low social status, strict gender roles, rigid social hierarchy, staggering social inequality etc.) that are potentially pernicious in that they can add to the cumulative life stress of individuals and thus contribute to the epidemiological patterns of disease and mortality.

As many other human phenomena, health is biocultural (Leatherman & Goodman, 2022). As the medical anthropological literature attests, biocultural research has many themes and subsumes multiple intellectual positions. Although this set of approaches is highly suitable to explore the critical junctures within health research, it is relatively new in medical anthropology and still quite rare in sociology of health. Biocultural research focus can be conceptualized within several approaches in the social sciences (Miller, 2022). The chronologically older account of the interrelations between culture and biology presupposes culture as an ecological (e.g., primarily external) factor and views cultural and ecological stressors as directly influencing human physiology in the framework of adaptability and plasticity, thus emphasizing the interplay between the social and the biological (Dufour, 2006). Conceptually this approach also fits into the logic of life history orientation and connected frameworks and in this manner lends support to the notion of calibrated adaptation in the debate about the effects of early

stress and low socioeconomic position in childhood in health outcomes in later life (Del Giudice, Gangestad, & Kaplan, 2015 for review).

Another angle is taken by the researchers who seek to quantitatively assess the impact of culture on human health via cognitive route, including cultural knowledge, internalized cultural ideas and cultural models into equation to explain the bridge from culture to health outcomes (Maltseva, 2018, a case for American students; Monocello, 2020, a case for Euro-American and South-Korean men; Snodgrass, Dengah, Upadhyay, Else, & Polzer, 2021, a case for Indian video-gamers). This emphasis on the cognitive component is an important theoretical development reflecting the recognition of the role of cognitive assessment of the situation in the stress process (McLeod, 2012; Pearlin, 1989) as well as the recognition of the invisible day-to-day chronic stressors that are associated with the society's normative culture (Schieman, 2019).

Ultimately, the new biocultural synthesis looks for the biological expression of social inequalities and takes the analysis to the macro-level suitable for the survey of economic structures and epidemiological level analysis, provides more evolutionary depth to the studied phenomena and highlight the important dialectic relationship between culture and human physiology (Leatherman & Goodman, 2020; Leatherman & Goodman, 2022).

Social factors in health and disease

Biocultural research builds on interdisciplinary evidence. During the last few decades, we have witnessed a growing interest in the ways various forms of social organization affect health. A series of discoveries in genetics and biological sciences have contributed to our better and more nuanced understanding of the relationship between society, culture and human physiology making it more open to interdisciplinary efforts. Now we know a lot more about the role of society and social stressors on health than 40 or 50 years ago (Berkman, Glymour, & Kawachi, 2014; Rubenstein et al., 2019). Integration of this new knowledge into the social sciences established new horizons for the students of society-health link and the proponents of biocultural scholarship.

Socio-epidemiological research offers ample insights into the risk factors as well as the biological pathways linking social conditions to the important health outcomes. The mechanistic explanation of the pathways between the social ecological forces and human condition proposes that the major way social factors can affect and shape health and illness patterns is by generating stress. Stress is the link between the society and individual physiology. Social life introduces additional sources of stress, and social stressors emerge as a particular kind of stressors. Social stress has been systematically shown to affect health outcomes directly. Both acute stressors and chronic stressors affect health, but chronic stressors are considerably more impactful. One such chronic stressor is culture (McLeod, 2012; Schieman, 2019). Low socioeconomic status (SES) (and especially poverty) is another major stressor that is often cited in socio-epidemiological research (Glymour, Averdano, & Kawachi, 2014) emphasizing higher frequency and intensity of the negative emotional experiences associated with low SES (Gallo & Matthews, 2003), poorer self-rated health (Präg, 2020), and less

adaptive health-seeking behavior and life style in later years of life (Shankar, McMunn, & Steptoe, 2010).

Research into psychophysiology of stress supplies systematic evidence linking social conditions to the important health outcomes, e.g. graded effects of SES on health (Adler et al., 1994), including pathways linking socially induced stress and health (Adler et al., 1994) and the mechanisms by which stress can impact health (Kawachi & Kennedy, 1999); the prenatal effects of maternal stress on offspring weight (McDade et al., 2019) and adverse health outcomes (Lobel & Dunkel Schetter, 2016); the role of timing of stress exposure through the life course (Yang et al., 2017), the effects of early life adversity on stress response in later years (Bosch et al., 2012) and the buffering effects of maternal warmth against the detrimental effects (namely, increased pro-inflammatory processes and decreased glucocorticoids production) of low SES in early childhood (Chen, Miller, Kobor, & Cole, 2010) and resistance to infection (Cohen, Doyle, Turner, Alper, & Skoner, 2004). Multiple laboratory studies in sociogenomics offered valuable new insights into the social regulation of gene expression, namely by supplying systematic evidence connecting the exposure to stressful conditions to unfavorable epigenetic changes (Cole, 2013) and dysregulation of immune system (Irwin & Cole, 2011), as well as possible explanation as to why subjective social status affects health more than objective SES (Murray, Haselton, Fales, & Cole, 2019). On the interpersonal scale, there is evidence suggesting links between stress in social relationships and poor immune function, specifically, the connections between strained social relationships, on the one hand, and slower wound healing, on the other (Kiecolt-Glaser, Marucha, Malarkey, Mercado, & Glaser, 1995; Kiecolt-Glaser, 1999) and linking "social pain" to lower immune function and higher perceived vulnerability to infections (Murray et al., 2023). On the macro-level, socioeconomic disadvantages have been implicated as social determinants of health into shaping the distribution of health risks with respect to non-communicable diseases (Marmot & Bell, 2019), including cardio-vascular diseases (Tawakol et al., 2019), and addressed as part of critical biocultural approach (Miller, 2022).

In epidemiological research it has been empirically shown that stress affects health both directly (by way of dysregulation of several physiological systems) and indirectly (by encouraging unhealthy behavioral choices such as smoking, and/or maladaptive coping behaviors such as overindulging in alcohol, misuse of pharmaceutical substances or overeating) (Segerstrom & O'Connor, 2012; Thoits, 2010). The rich literature on stress and health is further expanding and offering its findings to the avail of different subfields of social sciences. The last several decades of stress research have produced new data that changed our understanding of the stress process, the mechanisms by which psychosocial stress affects health and how the stress works to instigate pathology. Integrating the results from biological and medical sciences into sociological research on stress and disease has helped shifting our conceptualization of the role of social factors in patterns of aging, immunity, disease, and mortality (associations between chronic stress and hypertension (Bautista et al., 2019); links between loneliness, stress and disease (Berkman, Glymour, & Kawachi, 2014); differential effects of objective stress exposure and subjective (perceived) stress severity on health (Christensen et al., 2019); formulating mechanisms leading from stress to disease (McEwen

& Stellar, 1993; Pearlin, 1989); exploring co-evolutionary pathways between social stress and social behavior (Rubenstein et al., 2019); highlighting connections between stress, aging, and senescence (Zannas, 2019). The impact of childhood adversity (scarce resources, parental neglect, abuse etc. in early years of life which can be associated with low SES) on health has been acknowledged. While the existing theoretical models differ in the details of their causal arguments, childhood stress has been shown by multiple researchers to produce a cascade of negative symptoms in health in later life (Epel et al., 2018; Fogelman & Canli, 2019 for scoping reviews); adverse childhood experiences and incidents of abuse (Felitti, 2009); stress in early years of life and risks of chronic disease, especially cardiovascular disease (Friedman, Karlamangla, Gruenewald, Koretz, & Seeman, 2015; Friedman, Montez, Sheehan, Gruenewald, & Seeman, 2015); a life-course approach to stress emphasizing the impact of stress 'baggage' accumulated with years of life (Yang, Gerken, Schorpp, Boen, & Harris, 2017; Slavich, 2016); the link between distressing experiences and the speed of aging (Zannas, 2019).

On the other hand, we also know more about social and psychological factors that buffer the onset of biological risks. A series of review studies addressed both the networks of noxious effects of stressful life circumstances and limitations of their destructive impact on health (for example, clustering of life stressor and non-random nature of stressor exposure, requisites for stress exposure to result in disease etc. (Cohen, Murphy, & Prather, 2018; McEwen & Stellar, 1993); multidimensional nature of stress and its multifactorial effects on different aspects of health (Epel et al., 2018); possible effective interventions to slow down or even reverse the noxious effects of stress (Fitzgerald et al., 2021; West et al., 2022); the social and cultural context in which stress exposure occurs and is appraised (Schattuck, 2021). Attempts at developing interventions to slow down or even reverse the process of immunosenescence caused by poverty are made; most of them focus on lifestyle change (e.g. diet) and cognitive style (via meditation) (Fitzgerald et al., 2021; West et al., 2022).

SES as a social determinant of health: The role of culture

Culture influences every aspect of social and private life of individuals and has various manifestations in society. Cultural factors have been shown to affect health though institutions, norms and values, diet, healing practices, health-seeking behaviors and beliefs about human body, health, and illness. Culturally regulated social environment affects individual health throughout one's entire life span. Among other factors embedded in our social ecology, individual's social position in society is ranked as the most potent determinant of morbidity and mortality. SES is a profound dimension of social life and its influence is so penetrative that hardly any aspect of our lives and daily activities can be deemed as unaffected by it. It has been surmised that SES has attributes of culture, considering its tacit, conservative, and unconscious effects on physical and mental habits of individuals, as well as collectively shared experiences and preferences that underlie it (Bourdieu, 1979; Small, Harding, & Lamont, 2010). SES has been empirically shown to affect childrearing and parenting style (Chen, Miller, Kobor, & Cole, 2010); personality traits and dispositions (Chapman, Fiscella, Kawachi, & Duberstein, 2010); emotional life and well-being (Dietze & Knowles, 2020; Gallo &

Matthews, 2003); empathy, trust and prosocial behavioral tendencies (Wang, Chen, Poon, & Jiang, 2020); cognitive traits and attention (Mullainathan & Shafir, 2013; Na & Chan, 2016); causal attribution (Wang, Chen, Poon, & Jiang, 2020); marriage, sexual relations and reproductive choice (Pepper & Nettle, 2017; Williams & Finch, 2019); aesthetic perception (Kraus, Piff, & Keltner, 2011); perception of social justice, hierarchy and control over one's life (Wang, Chen, Poon, & Jiang, 2020); time orientation and perception of the future (Mullainathan & Shafir, 2013; Pepper & Nettle, 2017; Small, Harding, & Lamont, 2010); perception of money and spending behavior (for review: Mullainathan & Shafir, 2013; Pepper & Nettle, 2017); consumer behavior (for review: Mullainathan & Shafir, 2013; Pepper & Nettle, 2017); lifestyle (Bourdieu, 1979); diet, groceries budget and child feeding (Mullainathan & Shafir, 2013; Pepper & Nettle, 2017); tastes and preferences (Lamont & Pierson, 2019); speech and vocabulary (Pepper & Nettle, 2017); humour (Navarro-Carrillo, Torres-Marín, & Carretero-Dios, 2020); reading habits (Atkinson, 2016); forms of leisure (Bourdieu, 1979); weight (Liu & Guo, 2015; Non et al., 2016); disease profile (Miller et al., 2009); risks of abuse (Anda et al., 2010); health (obesity (Davies et al., 2014); cardiometabolic risks (Friedman, Karlamangla, Gruenewald, Koretz, & Seeman, 2015; Friedman, Montez, Sheehan, Gruenewald, & Seeman, 2015)) and health-related behaviors (gaming (McMullin, Shields, Slavich, & Buchanan, 2020); healthier lifestyles and health-seeking behaviors (Non et al., 2016)). Such shared socialization experiences eventually give rise to the intersubjectively shared realty within a group creating a distinction between us and "not us", further underscoring the collective nature of lifestyle and its ability to go beyond the behavioral routines into the domain of cognitive habits and dispositions.

Understandably much research has been done on the destructive effects of poverty and social disadvantage in health outcomes. Low SES displays the strongest and most consistent associations with morbidity and mortality for a wide range of conditions (Chen, Matthews, & Boyce, 2002). The most frequently cited finding in this line of research is the social gradient in health (Marmot, 2005; Wilkinson & Pickett, 2011). On each next level down the hierarchy, the individuals have higher scores on all categories of diseases and higher mortality rates compared to the individuals on the preceding level, regardless of whether the SES is operationalized and measured via education level, financial capacity or profession (Chen, Matthews, & Boyce, 2002: p. 295). This result suggests that the problem is not the waterline between the wealthy and the poor but the question of gradual descent into poor health with each next step down the social hierarchy (Marmot, 2005; Wilkinson & Pickett, 2011). In this context two important questions can be formulated by the students of health disparities: (1) Is it SES that determines individual health status, or is it health status that determines one's SES? and (2) What are the mechanisms linking health and SES?

One of the important things about low SES in childhood as a factor in health is that this condition of child's life can have a deep influence on child's health-related behavior and lifestyle choices in adult years (e.g., smoking, diet high in fat, lack of exercise) that are highly conservative and are a difficult target for interventions (Non et al., 2016; Non et al., 2020). In the meantime, such practices are responsible for 40% premature deaths in USA (Bull et al., 2018).

Another observation that concerns the social gradient in health should be made here. The concept of social gradient implies that lower SES is systematically associated with higher chronic stress, worse health and shorter life expectancy. This effect indeed has been found universally in all surveyed Western industrialized societies. However, the degree of universality of this gradient remains less well studied outside the Western samples and the question of why it exists has not received an exhaustive answer (Lea et al., 2021). While most of the studied societies display this gradient in the data, the societies also differ in terms of its shape in a manner that stress, disease, and survival of offspring is not monotonically distributed outside of highly stratified modern Western societies where inequality is high.

Furthermore, cultural variables also introduce variation with respect to the universally found SES effects in health outcomes. One such case is represented by the theme of social inequality that can take different forms in different societies and therefore can affect the shape of the relationships in data (Mackenbach, 2019). These are the results that would benefit from an ethnographic explanation comparing the effects of SES on well-being cross-culturally.

Conclusions

The recognition of the importance of social determinants of health can be traced back to the Black Report (1980). Although a powerful and enduring relationship between SES and health has been established empirically, specifying the concrete pathways and theorizing mechanisms linking SES to health has proved elusive, posing problems for designing effective policy interventions to reduce health inequalities. Socioeconomic status is widely considered predictive of a variety of positive and negative health outcomes, as is the level of education for the overall health. However, the mechanisms for those processes are not developed in sufficient detail. The implicit presuppositions of the causality between SES and health might be one of the reasons that complicate the formulation of the causal mechanism (Øversveen, Rydland, Bambra, & Eikemo, 2017).

The reduction of health inequalities is an extensive interdisciplinary endeavor with implications for research, practice, and policy development. Health inequalities are most often understood in association with the social determinants of health. There are several important avenues for future directions in research on health disparities, comprising understanding the protective factors and resources of resilience, upstream social determinants of health, the ways social determinants of health influence the body (i.e. embodiment), the effects of local geographical and cultural contexts, and overcoming methodological challenges to do with establishing causality, accounting for cumulative risk, and testing the multiple causal pathways (Palmer, Ismond, Rodriquez, & Kaufman, 2019; Thimm-Kaiser et al., 2023).

Social determinants of health can affect health positively or negatively. Vulnerability-focused conceptualizations of social determinants of health reflect a deficiency-focused perspective on health, while understanding the sources of resiliency embedded in strength-based paradigm is equally helpful and important for policy development (Thimm-Kaiser et al., 2023). Furthermore, it is important to be able to explain the

individual differences that account for the fact that not every exposure to adverse social conditions worsens health or leads to negative health outcomes. Understanding how protective factors operate on individual and community level would be advantageous for designing effective interventions (Palmer, Ismond, Rodriquez, & Kaufman, 2019).

Also, in terms of local geographic and cultural contextual factors, both behavioral (practices, traditions etc.) and cognitive (beliefs, knowledge etc.) aspects of culture has been shown to influence health and health behavior, it would be valuable to be able to integrate them both to achieve a more nuanced picture of society-health interactions. It further suggests a requirement for a more serious engagement with the concept of culture to explain health disparities.

While definition of culture as a term continues to lend itself to some debate within the social sciences, and especially within anthropological discipline (de Munck & Bennardo, 2019), there is a consensus in that sociocultural factors are viewed as important stressors and risk factors in health outcomes. Cultural factors embedded in social ecology contribute to the life stress and unite multiple social determinants of health. SES is considered the most potent among them. Studying the effects of SES and poverty on health outcomes is one of the well-researched themes within biocultural approach. Socioeconomic inequalities in health are large, robust, and well-documented (Phelan, Link, & Tehranifar, 2010).

At the same time there are some limitations to these conclusions. Most of the data on social gradient in health comes from studies covering wealthy industrialized societies. This is rather limiting as such a horizon does not permit us to get a nuanced enough understanding of the relationships between the socio-economic status and health. It also prevents us from explaining the "worsening" of the gradient (i.e. its increased steepness) in European countries and North America that is now widely discussed in epidemiological literature (Mackenbach, 2019). Social gradient in health exists in all studied societies as well as among primates, and at least partly these suboptimal health outcomes associated with the lower ranking can be attributed to the direct influence of chronic stress and greater allostatic load (i.e. independent of the access to modern medicine and health care services, differences in health-seeking habits and various socially stratified resources). The conclusions that can be drawn from the novel research done by anthropologists on samples from countries outside of wealthy Western nations, intensive social transformations (e.g., westernization, urbanization, transition to market economies etc.) modify the social gradient in health, reversing it (so that in the context of social transformations more economically secure individuals have more health problems and fewer surviving offspring compared to less economically well-off community members) (Lea et al., 2021). One of the results emerging from this research direction is that the transition to the lifestyle typical of the modern Western societies exacerbates the influence of SES on health and, probably, modifies the relationship between the social status and health (Lea et al., 2021). Thus the question of how and why the incorporation into the market economy changes the interrelationships between SES, stress and health is not quite clear and requires more effort on the part of fieldworkers in collecting more empirical data from smaller-scale, preindustrial societies.

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КАТЕРИНА МАЛЬЦЕВА

Соціальні детермінанти здоров'я у біокультурних дослідженнях: огляд літератури

Здоров'я людини є біокультурним явищем. Поміж викликів, які постають перед сучасними соціальними науковцями, виділяється потреба в розумінні, вимірюванні та поясненні впливу культури на фізіологічні стани людини. Тим часом, як вплив культури на мислення, емоції, поведінку та здоров'я людини як такий не піддають сумніву, причинні зв'язки між ними та їхні механізми досі не є зрозумілими до кінця. Сучасні біокультурні дослідження звертаються до різноманіття тем і застосовують чимало різних інтелектуальних підходів. Хоча цей набір підходів має гарну оптику, щоб досліджувати аспекти, критично важливі для вивчення здоров'я, це відносно новий дослідницький шлях. У площині даних, біокультурні дослідження спираються на міждисциплінарну доказову базу. Із розширенням та пожвавленням міждисциплінарної комунікації між соціальними науками та науками про життя останні кілька десятиліть стали свідками стрімкого зростання інтересу до того, яким чином різні форми соціальної організації впливають на здоров'я людини. Здоров'я формується під впливом дії багатьох чинників. Теорія соціальних детермінант здоров'я є підходом, що дає змогу дійти необхідного розуміння того, як саме людське суспільство може впливати на здоров'я та захворювання і формувати їх у групах людей. Соціально-епідеміологічні дослідження надають подальший ґрунт для розуміння чинників ризику, що асоціюються з цими детермінантами, а також каналів, через які опосередковується вплив соціальних обставин на наслідки у сфері здоров'я. Хоча соціальні детермінанти здоров'я концептуалізуються як такі, що найбільше відгукуються на спроби їх модифікації й, отже, мають бути гарними цілями для покращення здоров'я та якості життя індивідів, багато питань з цього кола все ще потребують розв'язання.

Ключові слова: *біокультурні дослідження; соціальні детермінанти здоров'я; соціальні стресори; культура*

KATERYNA MALTSEVA

Social determinants of health in biocultural research: a review of evidence

Health is biocultural. Some of the challenges the social scientists are traditionally facing include understanding, measuring, and explaining the effects of culture on human condition. While the effects of culture in cognition, emotion, behavior, and health are not disputed, the casual relationships between them and their specific mechanisms are still not clearly understood. Current biocultural research explores multiple themes and subsumes several diverse intellectual positions. Although this set of approaches is highly suitable to explore the critical junctures within health research, it is a relatively new research trajectory. In terms of data, biocultural research builds on interdisciplinary evidence. As the interdisciplinary communication between the social and life sciences has expanded and intensified, during the last few decades we have witnessed an incremental interest in the ways various forms of social organization affect health. It is understood that health is shaped by many factors. Social determinants of health theory is a framework offering important insights into how exactly human society can affect and mold human health and disease. Socio-epidemiological research offers ample insights into the risk factors associated with these determinants, as well as the pathways linking social conditions to the important health outcomes. One of the major ways social factors of such nature can affect human physiology and shape the patterns of health and illness is by generating stress. Being present in one's life from birth through maturation to senescence, social determinants of health are conceptualized as exercising systematic pressure in daily lives of individuals. SES is considered the most potent among social determinants of stress. While social determinants of health are conceptualized as the most modifiable among the health-determining conditions and therefore highly actionable to improve health and the quality of life, many questions still require solutions. One of the possible avenues for both improving our understanding of how social determinants of health work and painting a complete picture of what the social gradient in health is, is by way of inclusion of the ethnographically diverse settings, to glean more data from non-Western societies in order to explore how the social gradient in health emerges.

Keywords: *biocultural research; social determinants of health; social stressors; culture*