frontiers in Communication

ORIGINAL RESEARCH
published: 02 August 2019
doi: 10.3389/fcomm.2019.00037

Painting a Community-Based Definition of Health: A Culture-Centered Approach to Listening to Rural Voice in Chaquizhca, Ecuador

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The terms "health" and "well-being" are commonly used in health communication research. These terms, despite calls for a consensus definition, are rarely explicitly defined. We argue that, instead of imposing a universal definition of health or well-being, communities can be better served if we adopt a culture-centered approach (CCA) and listen to their local, contextualized definitions of health. To demonstrate community articulation of a definition of health, we offer an analysis of wall art created by and with a community and our service and research team. After understanding a definition offered by a rural community in Chaquizhca, Ecuador, we articulate how a community-based definition of health can become a culture-centered way to operationalize definitions offered by the World Health Organization in ways that better serve local communities.

Keywords: definition of health, Ecuador (country), asset based community development, service-learning (SL), children

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Specialty section:
This article was submitted to Health Communication, a section of the journal Frontiers in Communication

Received: *26 March 2019*
Accepted: *05 July 2019*
Published: *02 August 2019*

Citation:
Bates BR, Marvel DL, Nieto-Sanchez C and Grijalva MJ (2019) Painting a Community-Based Definition of Health: A Culture-Centered Approach to Listening to Rural Voice in Chaquizhca, Ecuador. Front. Commun. 4:37. doi: 10.3389/fcomm.2019.00037

INTRODUCTION

"Health" is a key term in health communication, yet there is very little agreement on what "health" is. Although there is widespread agreement that the World Health Organization definition, first articulated in World Health Organization (1948), that health is a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity," this conceptualization defers us to another term: "well-being." Indeed, in their respective reviews, Niebroj (2006), Webster (2009), Huberts et al. (2011), and Brussow (2003) each found that the terms "health" and "well-being" are used in multiple competing ways by multiple health and communication researchers. Instead of a shared definition, these reviews found that communication scholars diverged from each other and from medical scholars, and that the findings from one study could not be directly translated to other studies because they did not share explicitly fundamental definitions of their phenomena.

Webster (2009) claims that a unified definition of health and of well-being is needed to "allow for communication across disciplines and the ability of researchers to build upon prior studies" (p. 25). More forcefully, Niebroj (2006) asserts that, without a unified definition, patients, doctors, and

societies will abuse the power of medicine and commit malpractice. Others (e.g., Habersack and Luschin, 2013) believe that the failure to have a clear definition makes national law and policy to support health difficult.

It may be useful to remember however, as Bircher (2005) does, that "since antiquity the ways in which the word "health" has been used were closely related to the thinking at the time" (p. 338). That is, although there is an allure to a constant and consistent definition of health, what "health" means changes across times, spaces, and contexts. Bircher's view reminds us that most decontextualized definitions of health are written by actors in the global North. As such, these definitions have been developed in contexts that emphasize the role of a rational choice-making individual (Dutta-Bergman and Doyle, 2001; Dutta-Bergman, 2005a), removed from the social, economic, and environmental contexts in which that individual resides (Dutta-Bergman, 2004a,b), and (re)produce systems of health that exert "expert" control over bodies at both the interpersonal (Dutta-Bergman, 2004b) and mass media levels (Dutta-Bergman, 2005b).

To better address the actual health desires of a people, and to avoid setting health agendas in ways that advantage dominant regimes, Dutta (2008) suggests that, rather than assuming experts from the global North understand what health is, a culture-centered approach (CCA) that uses a dialogic approach is better able to allow members' voices to become the "starting points for understanding what health is, what the health problems faced by the community are, and the ways in which such health problems might be dealt with" (p. 107). Fundamentally, this alternative approach requires, at least, "locating the agency for examining health practices," defining problems to be addressed, and suggestions "in the culture being studied," rather than in the expert, and "emphasizing the meanings that are co-constructed by the researcher and the cultural participants" (Dutta-Bergman, 2004a, p. 259).

This argument for local communities to define health is similar to the one offered by Zoller (2012) when she accesses activists' definitions of health: that "definitions of health, like all definitions, are political and service particular interests" (p. 22). If we accept a definition without first understanding how that definition emerges, we may unwittingly (or worse, wittingly) support particular theories of the causes of disease and ill health, who is responsible for those causes, and what the appropriate response to disease and ill health is. Zoller (2010, 2012) outlines three primary approaches to understanding health in contemporary public health. First, biomedical approaches (e.g., germ theories, genetic theories, bio-psycho-social theories) emphasize the role of microorganisms and mechanical breakage in the body and promote classical bureaucratic capitalist responses. Second, lifestyle approaches look to individual choices and personal agency in health outcomes, thus leading to neoliberal responses. Third, structural approaches argue that access to or lack of access to social, economic and political resources needed for health leads to health outcomes, thereby calling for radical interventions. Although these are primary approaches to defining health in the global North, Zoller makes clear that these approaches can intersect, there are lacunae among them, and there are other definitions that they likely omit. To understand how a community thinks about health, and thereby gain insight into its theories of illness causation, responsibility, and treatment, we must engage that community specifically. That is, rather than imposing one of these approaches to health on a community, we should instead consider how, within cultural and socioeconomic contexts, the material and symbolic elements of health are brought together by specific communities (Zoller, 2005).

To move away from purporting to offer *the* definition of health and to give voice to *a* definition of health, and to illustrate the utility of Bircher's and Zoller's approaches to multiple, contextually bound definitions of health, we offer a discussion of a community definition of health articulated in Chaquizhca, Ecuador. We argue that by listening to the voices in that community articulating their own definition of health, we are able to avoid imposing an academic/governmental definition on the community. This act provides opportunities for engaging the community to assert agency in developing its health and well-being. We begin by outlining in greater detail the assumptions of the Culture Centered Approach. We then turn to the community of Chaquizhca and how we engaged with that community. After providing a description of our processes at a school to allow a community definition of health to emerge, we discuss how that definition was displayed—literally, on a wall—in the community. Finally, we offer some implications this analysis could have for approaching communities in defining health for themselves as well as some ways that our engagement with the community informed the larger project called the "Healthy Living Initiative."

THE CULTURE CENTERED APPROACH TO HEALTH COMMUNICATION

Across multiple cultural contexts, the CCA has demonstrated both its ethical and practical power in addressing health issues in a way that empowers marginalized populations and de-centers expert control over societies (for an overview, Dutta, 2018). Communication, in the CCA, emerges from and exists at the intersections between and among three powerful concepts: culture, structure, and agency (Dutta, 2008). In their White Paper, Dutta et al. (2016), see also Dutta (2018) outlined these three concepts. They write, "culture reflects the shared values, practices, and meanings that are negotiated in communities," "structure refers to the systems of organizing that enable or constrain access to resources," and agency "depicts the enactment of everyday choices and decisions by community members, amid structural constraints that reflect the daily negotiations of structures" (Dutta et al., 2016, p. 4). To access and understand communication that emerges from these intersections, Dutta et al. assert that "the core methodological tool for the CCA is dialogue" (p. 5). Although dialogue is the core tool, this dialogue is encountered with specific techniques including ethnographic observation, focus groups, interviews, community forums, photovoice, and other practices in which dialogue between researchers and community and between community members and other members can be enacted.

The utility of the CCA is well-recognized, and analyses that focus on each of these concepts helps to interpret how local communities negotiate issues of health and well-being in ways that resist assumptions imposed by the global North. Moreover, whereas the standard approach often imposes an understanding of health on a community, the CCA can access and make clear local marginalized communities' constructions of health. While the CCA places agency at the theoretical core, Dutta and Basu (2007) recognize that culture "emerges as the strongest determinant of the context of life that shapes knowledge creation, sharing of meanings, and behavior changes" (p. 561). In applications of the CCA, across multiple contexts, the role that culture plays in shaping possibilities for health communication is evident. The ways that culture guides and is guided by understandings of health is well-documented in cases of understanding general health among Bangladeshi immigrants to the United States (Dutta and Raihan, 2013) and among African Americans (Dutta et al., 2018a), as well as specific health contexts such as coronary heart disease among medically underserved South Asian immigrants to the US (Kandula et al., 2012), diabetes among Zuni First Nations members (Newman et al., 2014), family planning among young women in Nepal (Basnyat and Dutta, 2011), and dietary choices by Asian Indians living in the US (Koenig et al., 2012). These findings regarding culture are not, however, claims that culture itself is a barrier to change (as is often assumed in the standard approach), but rather that culture helps articulate shared knowledges of what constitutes health and healthy behaviors, as well as providing guidance on what calls for behavioral change would be consonant with and what is dissonant with other lived practices in communities.

Each of the issues encountered in studies that emphasize the role of culture also encounter a variety of structures. These include economic structures that limit access and affordability, as well as gender, filial, and other structures that guide and are guided by behavior. Although the aforementioned studies also discuss these structures, other analyses emphasize structure in explaining so-called health choices. For example, Dutta et al. (2018b) argue that foreign domestic workers in Singapore face structural employment conditions that block both access to health care and deny domestic workers the rights of citizens to articulate their need for this access. Although Dutta et al., found that foreign domestic workers and their employers had similar cultural understandings of what health is, the economic structures that allowed exploitative employment and the legal structures that prevented domestic workers from challenging this abuse had powerful impacts on health that standard approaches to health communication would be unlikely to identify. In this case, structure limits the agency of the domestic workers to challenge their conditions (see also Gao et al., 2016; Dutta and Kaur-Gill, 2018, for how narratives of mobility and agency are contradicted by Singaporean and US society for Bangladeshi and Chinese migrant workers, respectively).

Finally, agency emerges between culture and structure. Agency does not mean that people are able simply speak and act as they wish, but agency in the CCA is constrained and enabled simultaneously by the cultures in which one resides and the structures that exist. Each of the aforementioned studies also indicates how agency is shaped by and shaping of both culture and structure. This agency, often expressed in dialogue among community members and between and among community members and activists, workers, and scholars of change, emerges most clearly in sympathetic environments that are cultivated specifically to allow participation (e.g., Dutta, 2014, but for a specific application of a photovoice project addressing hunger, see Dutta et al., 2013). However, agency also emerges in environments that are less sympathetic to dialogue such as traditional Entertainment Education consultancy approaches (see the debate among Dutta and Basnyat, 2008a,b; Linn, 2008). When opportunities for participation and dialogue are present, community-based definitions of health and approaches to reach health are more likely to emerge, but if, and only if, participation and dialogue are employed for true listening and not as a fig leaf to hide a global northern actor's pre-determined definitions and implementation programs (Dutta, 2014). Our mural project, executed in the community of Chaquizhca, sought to enact this kind of dialogue.

THE PROCESS OF COMMUNITY ENGAGEMENT

The mural project on the school wall was developed as part of a multi-year service-learning collaboration between Ohio University's Infectious and Tropical Disease Institute (ITDI), Pontificia Universidad Católica del Ecuador's Center for Health Research in Latin America (CISeAL), and their partner communities in Loja, Ecuador. The service-learning program functioned within a larger participatory research intervention designed in conjunction with our Healthy Living Initiative (HLI), a long-term, multidisciplinary research initiative that aims to support sustainable socioeconomic development of rural communities as the main tool for the control of Chagas disease (see, for example, Grijalva et al., 2015; Nieto-Sanchez et al., 2015; Marco-Crespo et al., 2018; Oduro et al., 2018; Patterson et al., 2018).

Collectively, ITDI, CISeAL, and the communities work toward bringing health services to traditionally marginalized communities in Ecuador. Although the larger project addresses these services in multiple communities, the focus of this paper is on an engagement with Chaquizhca, a small community in Chile Parish, Calvas County, Loja Province. The fifty (50) houses in this community are located in a dry mountain subtropical forest ecological zone, reflecting a yearly annual rainfall between 1,600 and 3,200 mm, an average relative humidity of 78%, and an extended rainy season from December to April (Campozano et al., 2016). The terrain is mountainous and marked by deep dendritic ridges. Home locations are one to two km above sea level, dispersed, and often difficult to access because of poor road conditions and limited transportation options. Most of the members of the community practice subsistence agriculture or perform day labor; their socioeconomic conditions are affected by limited job opportunities, poor access to sanitary, health and education services, and isolation and marginalization that restrict their access, participation, and competitiveness in larger markets.

Chaquizhca has one school. It is named after the date it was founded, "*Escuela de Educación Básica 27 de Octubre*" (Basic Education School, 27th of October). Each day, the school serves 20 to 35 children; daily attendance varies depending on planting and harvesting seasons, weather, and other factors. The students range from 5 to 12 years of age, which corresponds to first grade (equivalent to US kindergarten) to seventh grade in the Ecuadorian system. The school is staffed by three teachers, one each to deliver academic content to students in first grade, to students in second to fourth grade, and to students in fifth to seventh grade. It is composed of two larger classrooms (one for second to fourth grade, combined, and one for fifth to seventh grade combined) and one smaller classroom (for first grade). It also has a kitchen area and sanitary facilities. In the front of the school, there is a cemented multipurpose play area with two soccer goals and two basketball hoops at its ends, and two poles in the middle for installation of a volleyball net.

During this project (implemented in the summers of 2013, 2014, and 2015), the service-learning team conducted assets-based interviews, asset-mapping activities, and focus groups with community members in three communities in Loja province, including Chaquizhca (all activities were approved by the Institutional Review Board at Ohio University and/or the Comité de Ética de la Investigación en Seres Humanos at Pontificia Universidad Católica del Ecuador and are reported in, among others, Marco-Crespo et al., 2018; Oduro et al., 2018; Patterson et al., 2018; Bates et al., 2019).

Our work employed Kretzmann and McKnight's (1993) model for Asset Based Community Development (ABCD) and sought to identify community interests and strengths. This model emphasizes a community's assets rather than needs as a point of departure for community revitalization. For example, cultivating and connecting already-present knowledge of the location of medicinal plants, traditional culinary combinations of agricultural crops to create complete proteins, or being able to make porotillo brush brooms that spread a natural insecticide (Nieto-Sanchez et al., 2015) may better serve the community than asking why the community lacks a pharmacy, does not buy meat at a supermarket, or does not often spray highly toxic commercial pesticides. By cultivating these practices and connecting non-practicing members of the community to practicing members, ABCD approaches seek to provide opportunities for community members to invest their gifts, skills, and abilities and, by becoming more aware of individual and collective assets, communities will be able to create more opportunities to share, collaborate and invest their assets. The expectation is that communities will then become healthier, thriving spaces and be better equipped to meet future challenges. In a service-learning collaboration, focusing on community assets rather than needs allows service projects to be led by community interests, as opposed to perceived deficiencies (Jacoby, 2015). This emphasis on community strengths contributes to an environment of collaboration, and potentially deconstructs the standard approach's assumption that "the helper or, in this case, knowledge-based development agency, has the 'answers' and disseminates them ex cathedra to the doers" in development projects (Ellerman, 2001, p. ii), and as such, challenges the paradigm that is problematic in many service-learning partnerships (Jacoby and Associates, 2003).

The ABCD approach, like the CCA, upends critical assumptions in the standard approach (Mathie and Puntenney, 2009; McKnight and Russell, 2018). First, the ABCD approach challenges the assumption that communities are in a knowledge or resource deficit and, instead, asserts that communities are rich in assets and have significant knowledge of their lived conditions. Second, the ABCD approach rejects the idea that outside agencies should see themselves as empowering local communities to change and, instead, insists that communities begin by addressing their own concerns and decide collectively whether outside agencies should be involved in efforts for community change. Third, the ABCD approach does not evaluate success on whether the goals of a grant proposal or a millennium development indicator goal have been attained but, instead, views enhancing collective community visioning and community relationships so that they determine their own goals and resources as the primary outcome of interest.

Rather than bringing pre-determined definitions of problems, and their accompanying solutions, as is done in the standard approach, enactments of ABCD approaches are guided by five themes (Ellerman, 2001; see also Hirschman, 1973; Kohr, 1973; Schumacher, 1973). First, the community that is engaged must be encountered where it is and through its understandings, and not seen as a blank slate to be written on by outside influences. Second, actions must be guided by the knowledge, values, and worldview of the community, not those of the outside influence. Third, transformative change should not be a form of social engineering to impose neoliberal structures and values on a community. Fourth, "benevolent" charity should not be employed as it degrades the receiving community and creates dependencies on international aid organizations and global northern nation-states. Fifth, and finally, the community must be the leading agent in social transformation. This approach, then, with its acknowledgment of issues of structure, power, voice, and agency in social change, and its call to resist the standard approach, fits well with the CCA.

The community maps generated through the asset-mapping process provided us insight into the communities' perceived resources and assets and the composite asset maps provided the communities with data and a visual representation of local agricultural resources, interests and skills of community members and infrastructural assets in the communities (Bates et al., 2019). This asset-mapping process led to the development of a community gardening initiative, which informed subsequent service-learning projects including this school mural project. In addition to assembling play equipment in the schoolyard, the teachers and principal at the school serving Chaquizhca expressed interest in having the newly reinforced wall painted as a collaborative service-learning project. They informed the service-learning team that they wanted to use the wall to depict healthy living. After the Institutional Review Board at Ohio University determined that the wall painting was exempt from review as non-generalizable, non-systematic investigation of publicly observable behavior, they approved an oral community-based informed consent procedure. Before the children began their

work on the wall, informed oral consent from all parents and schoolteachers was obtained, and oral assent from the children was obtained. After consent and assent was affirmed, the children guided what should be painted on the wall.

Specifically, over a 15 day period, we engaged the children of the community in a series of dialogue, discussion and drawing exercises (see Nazir et al., 2013 for a sample process guide). On the first day, the children split into pairs and together listed all the words that came to mind when "culture," "community," and "healthy living" were used. All of the children's' ideas were recorded on a white board. Over the next 3 days (days 2, 3, and 4), the children used markers, color pencils, and crayons to draw their answers to three questions: "What would you like to see in your community in the future?" (day 2); "How can you preserve your culture in the future? How can you practice your culture?" (day 3); and, "What can you do to make your home/family/school/community healthy?" (day 4). On the fifth day, the children and teachers were asked to determine what they thought the most important ideas were, and the children focused on the theme of a healthy life and chose specific ideas that they thought were the most important to a healthy life (described below). Following the weekend (days 6 and 7), on days 8 through 12, for an hour each day, the children self-divided into three groups: one groups of painters, one group of actors, and one group that wanted to neither paint nor act. The process followed by the actors will be discussed elsewhere. Children who neither wanted to paint nor act helped in the community garden or worked on homework. The painters used these 5 days to create a rough sketch of their ideas on paper, draw these ideas on the wall at larger scale, and to paint to fill in those drawings. The project team, after the children returned to class each day performed minor touch up and applied varnish to the paintings to protect them from the elements. After the next weekend (days 13 and 14), on day 15, the children who chose to paint presented the finished wall (and the children who chose to act presented their play) to the community. Over 100 people attended the event, including family members, community members from Chaquizhca, project staff, and teachers and children from one of the neighboring communities. This wall displays the definition of health articulated in Chaquizhca.

READING THE WALLS TO DEFINE HEALTH

After the children and teachers were asked to generate a listing of the features that were needed to have a child grow up healthy and happy, the list was reduced by asking children and teachers which messages they wanted to memorialize on the new wall around the school. Each wall segment became a panel to be decorated. Each segment of the wall is about one meter tall at each end, declines in a wedge shape to the middle third of the segment and flattens such that the wall is approximately half a meter tall. The segment then inclines in a matching wedge until it is again one meter in height and flattens. Each panel is ∼10 cm thick and three meters in length. Each section face is painted white, with the top painted in alternating red, yellow, and blue: the colors of the Ecuadorian flag. Although nearly 20 panels would be available, there would not be enough space to memorialize all of the potential contributions. The teachers and children decided that they wanted images of healthy lifestyles, to display the rights of children, and to recount a well-known folktale from a volume illustrated by the children at the school. Put formally, the teachers insisted on the inclusion of two panels promoting social health, the children preferred nine panels promoting physical health, and the remaining panels, the children and teachers agreed, would promote ethical health of children through storytelling.

SOCIAL HEALTH

Although the two teachers clearly held positions of authority over the children, they only insisted that two panels be devoted to the issue that the teachers thought most important: social health of the child. In so doing, the teachers enacted their structural authority over the children to include what they believed to be an important message. Although the teachers did not use the term "social health," they insisted that institutions—institutions that guide the political, educational, and social structures of rural Ecuador—recognize the voice of all citizens, no matter their status. They also held that the formal recognition of rights is a strong path toward recognizing this status. Their framing, then, fits well with the World Bank framing of social health (see, Davis, 2004; United Nations, 2016). Specifically, these two panels refer to the Convention on the Rights of the Child adopted by the United Nations General Assembly in 1989 and ratified by Ecuador in 1990.

The first panel (see **Figure 1**) simply states, "*Derechos del niño/a. Los niños tenemos derecho a:*" (Rights of the boy/girl. The children have the right to…" Here, there is explicit reference to the treaty on the rights of the child. To ensure that all children are included, the ratified language is slightly altered. Rather than referring to the rights of the "*niño*," literally boy, the teachers asked that the language allow both boys (*niños*, also translatable as children) and girls (*niñas*) to be named on the wall. Although this is a minor change textually, the use of inclusive language may be important for promoting gender equality in the community. The words are painted in the colors of the Ecuadorian flag: yellow, blue and red. Each group of three letters repeats this color order, thus tying the rights of the child to an explicit manifestation of Ecuadorian identity. In including both boys and girls as having these rights, this panel may also authorize both boys and girls to have agency and voice in their community.

The second panel, using the same color scheme, explains what these rights are (see **Figure 2**). The final line of panel one serves as an introductory clause. Here, in naming the specific rights, we see that the rights exceed those contained in the Convention on Human Rights. In accordance with the Convention, the wall states that children have the right to life (*la vida*) and to a family (*tener una familia*). Although the Convention explicitly names a right to life, the having of a family may be broad enough to incorporate the Convention's demand that the child be included in a familial grouping, even when their biological parents may be unavailable. Similarly, the Convention's requirement that children be protected from exploitation and

FIGURE 1 | *Derechos del Niño/a*.

FIGURE 2 | Rights of the child.

FIGURE 3 | *¡Deportes Saludables!*

abuse appears to be reflected in the right "*ser respetado y a no ser rechazado*" (to be respected and not rejected). Other terms from the Convention, however, are not included on the wall, such as the Convention's assertions that no child may be enslaved or suffer capital punishment. Just because the teachers and the children did not include these, however, does not mean that they would accede to slavery or to the death penalty. Instead, the children expanded the list of rights. We see that the children engaged in a dialogue to include other rights not contained in the Convention. The children also claimed the right to health (*la salud*), to play (*jugar*), and to education (*la educacion*). There is some slippage, perhaps intentional, between the rights that are demanded from a human rights perspective and those that are demanded by members of the community. In any case, the listing of rights, colored with the hues of the Ecuadorian flag, may make these rights present and localized, and, in turn, may make children and parents more aware of the inherent rights of the child for social health. That is, by tying together the resources provided by the world (the Convention) and the nation (the flag), the children and their teachers wove their rights, using an agentic voice, into two already existing powerful structures.

PHYSICAL HEALTH

The second grouping of panels was most strongly informed by the children. For a child to grow up healthy and happy, the children of Chaquizhca thought that children should play "*¡deportes saludables!*" (Healthy Sports!). These nine panels begin with an introductory panel with this phrase (see **Figure 3**). Sports (*deportes*) appears in the center in block letters, while the modifier healthy (*saludables*) is written in red script immediately under it. Both words are framed by exclamation points following Spanish grammar. In the upper left sooner of the panel appears a stylized Ecuadorian flag, while a flag for Calvas county (where the school is located) appears in the upper right corner. The remaining panels illustrate what the children mean by healthy sports.

Some of the panels illustrate independent play. For example, one panel (see **Figure 4**) shows four children jumping rope, two boys and two girls. Behind the first boy is a rectangular brown structure. Between him and the first girl are a series of rounded humps, one with an additional upright shape. Between the first girl and second boy is a swing set, and between that boy and the second girl is a slide. Over the shoulder of the second girl is a tree on a hillside. Upon closer examination, it becomes clear that these four children are students at the school, and they are enjoying the new playground that the service-learning team has helped them build. The rectangular structure is the newly extended school house, and the rounded humps and structure are a play set dragon made of used tires by members of the service learning team (see **Figure 5**). The swing set and slide were also installed at the same time the play set dragon was built In a very real sense, the children are using new enabling structures that are now present in their community. In addition, the four children are children from the group that participated in this wall painting exercise. Although members of the service learning team painted all of the children on the wall the same color and shade, the children remixed brown, white, and yellow paint to

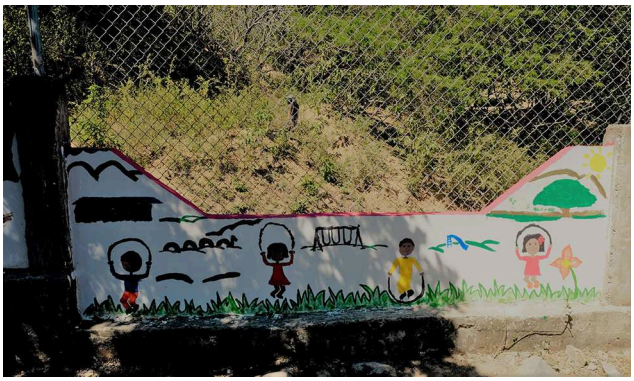

FIGURE 4 | Children jumping rope.

FIGURE 5 | Dragon on the playground.

FIGURE 6 | Additional play.

FIGURE 7 | Children cycling.

achieve colors as close to their own skin tone as possible, and each child painted themselves into the wall. Whenever any child appears in any panel on this wall, it is the self-representation of a specific child at the school, and, in painting themselves into the picture, the children appear to be anacting agency over their own representation. A second panel (see **Figure 6**) shows additional play. Children perform jumping jacks, head stands, sit-up, trampoline jumps, and stretching exercises, each a part of the children's structured physical education curriculum at the school. Here, we see that the structure of the school curriculum comes into play as a means of defining physical health.

The final panel displaying independent play occurs outside the school (see **Figure 7**). In the center is a girl in pink, riding her bicycle down a path. She has just descended a hill along a long windy path. The hill is largely barren, with a brown dirt road weaving between green land devoid of trees. Two other cyclists are descending the path as well. All three children are headed toward a village on a verdant hill. The green is much brighter and more solid. A bright blue river or road weaves down this hillside. The scene is meaningful in multiple ways. Many of the children take similar journeys each day coming to and from school. Although only a kilometer or so separates the schools and homes in a direct line, the rugged hillsides hills require many switchbacks, leading to hours-long journeys each way. The school sits on less productive land, while the homes are on richer land that sometimes has better access to water. The scene drawn by the children reflects, perhaps, more than play. In addition, this panel reflects well how culture shapes the children's understanding of physical health; geography shapes where homes can be placed, and the placement of homes creates the conditions for transportation, and the conditions for transportation then influence how geography itself is navigated. Participating in healthy activities can allow a child the strength to manage this journey each day, and the home structure and geographical structure creates this need for a particular kind of health body.

Other panels depict team and cooperative play. In most panels, as in the cycling and playground panels, the upper left and right corners contain images of the hillside, local homes, or the sky to help situate the panel within Calvas County; the play occurs within a particular set of places and spaces. The only panels that do not appear to be bound within Calvas County are the panels featuring basketball and volleyball. In the basketball picture (see **Figure 8**), three players in green take

FIGURE 8 | Basketball.

FIGURE 9 | Volleyball.

on two players in red. A girl from the green team shoots the bright orange basketball toward the net. In the volleyball picture (see **Figure 9**), three players from the blue team are ready to return the shot from the four-person green team. The action here takes place on a bright yellow volleyball court divided by a red net. All teams are mixed-sex. Whereas, all of the other images could contain makeshift or common equipment, these images show specialized equipment and specialized uniforms. This may explain why they do not show the hillside or the school; because they are specialized sports, they may require special places to be played. These pictures, as manifestations of healthy sports show an idealized version of basketball and of volleyball. Although the school does have a single volleyball and a volleyball net that can be stretched over the unpainted concrete forecourt of the school, the school has no uniforms for a team. And, in contradiction to the image painted, the school has no basketball uniforms. In this case, rather than indicating a resource that is present, the children may be exercising agency to call on the school to use its structural resources to provide this additional equipment.

Standing in opposition to this specialization is an image of children playing soccer (see **Figure 10**). In this image, we see on the left end a hillside topped by the local water pumping station (a station then-recently installed as a community resource to

FIGURE 10 | Soccer.

provide water infrastructure to the community). Near the bottom of the hill, a girl in a red shirt and blue plants guards the goal. A boy in a blue shirt and green pants is kicking a brightly colored ball toward the goal as a second girl, this one wearing a red dress, defends. At the other end of the pitch, a boy in a green shirt and blue plants waves that he is open for a pass and a third girl, wearing a red skirt and red shirt, stands ready in case the ball comes her way. The final child, a boy in a red shirt and blue pants, stands where we would expect the goal on the other end to be. A local home appears behind him instead. Here, we see a much less formal setting for team play. Although there appears to be some sense of teams—the red team against the blue team—there are not uniforms; indeed, the final boy stands out, as we cannot be sure to which team he should be assigned. There is also limited equipment; there is only one goal on the pitch, and the ball does not appear to be a regulation ball. Even though they may not have uniforms and equipment, the children appear to be having fun. Their game can be played by anyone, anywhere, and with limited equipment. This sense of openness to play, and the ability to play anywhere, is also reflected in the two remaining panels (not shown here). The children playing marbles and the children at tug-of-war could be playing nearly anywhere and without needing expensive specialized equipment. Collectively, these panels reflect a setting that reflects the children's ability to make-do, and thus enact agency, within a structurally limited environment. They also show how these children can focus more on what is available to them—i.e., a single goal, a ball, a circle drawn in the dirt, a length of rope—and less on what is not available. Although they operate within a set of structures that could be read as limiting their right to play, the children are able to transform their resources into enabling factors.

ETHICAL HEALTH

The final set of panels—eight in all—illustrates a story. This story was narrated by the children to our service learning team, written and illustrated by the children into a small book, transformed into a play enacted by the children, and then painted onto the wall (see **Figure 11** for an example). This story emerged over time in

FIGURE 11 | Fox and Rabbit.

engaging with the children of the community. It is a story of Fox and Rabbit, a significant, multi-part, ongoing narrative shared in Andean communities (see Howard-Malverde, 1981; Allen, 2011 for a review). Fox and Rabbit are important characters in a tale that is well-known in Andean cultures, including this community in Chaquizhca where the children told us the story. In each story, sly Fox attempts to eat the wily Rabbit, and Rabbit generally thwarts his plans. As a story from oral tradition, it has been retold many times, in many ways, and in diverse combinations. The storyteller can weave any one Fox and Rabbit story into other stories, or tell each as a stand-alone story. As such, Fox and Rabbit are cultural resources that can be employed to teach lessons to young people (and anyone else who might be listening).

The children told us a story that they found particularly amusing. In the children's telling, Rabbit is caught in a trap while stealing vegetables from an old woman's garden. Fox promises to let Rabbit out of the trap. Rabbit tricks Fox into staying in the trap, just for a moment. Rabbit, having stuffed himself with vegetables and believing Fox to be trapped, takes a long nap. The old woman sees Fox in the trap and decides to cook him for dinner in retaliation for her belief that Fox has been eating her vegetables. Fox persuades the old woman that, because he is very skinny, he cannot have eaten her vegetables and that he will make a poor stew, but he knows where he can find something good to eat. Fox seizes the sleeping Rabbit, and, together, Fox and the old woman have a rich stew.

Like many stories, this tale of Fox and Rabbit contributes to the ethical health of the children in the community. It draws on a cultural resource to teach children lessons about honesty and hard work that contribute to a healthy, functioning community. What makes this story unusual in the Fox and Rabbit lore is that Fox is the victor in the story. Both Rabbit and Fox are trickster characters. Rabbit, in this incarnation of the story, takes on an unusual role in that he is an unredeemed trickster. Rabbit is to be punished for his thievery, and he attempts to redirect his punishment to Fox. Fox, in most stories, is simply ravenous, and this means that his hunger takes over his decision-making processes. He may have let Rabbit out of the trap in order to eat Rabbit, but he is tricked to get into the trap himself. Although Fox is trapped, he retains enough of his cunning to escape the old woman's stew pot. Fox recaptures Rabbit so that Rabbit can face the consequences of his thievery. Not only is Rabbit justly punished, but also Fox easily caught Rabbit because Rabbit had become complacent. Had Rabbit not been so gluttonous following his vegetarian larceny, and had Rabbit not become slothful, Rabbit may still have had the opportunity to escape. Yet, because Rabbit took a food-saturated nap, Fox caught him. Layered within this story are multiple possible ethical lessons, for example, that punishments await thieves, gluttons, and indolents and that, if one keeps their head in a stressful situation, one can overcome hardship. As indicated by Booth (1988), the stories we tell propose a "way of living" (p. 205); that is, they offer lessons that allow individuals and communities to develop an ethical community. Moreover, when the children of the community retell this story of Fox and Rabbit, they are recirculating these lessons and showing their internalization. It is important to remember that, although ethical development of children is rarely, if ever, mentioned in definitions of health that emerge in the global North, the children specifically chose to include this story and its moral lessons when the articulated their definition.

In addition to offering explicit lessons to children for ethical choice, the sharing of this story offers an additional layer of ethical health. Stories, Booth continues, are invitations to do more than accept a worldview, they are invitations to see a storyteller as a potentially valid and valued interlocutor. As he (1988) puts it, the "act of deciding whether to accept" the gift of a story "is itself a gift" (p. 222). When the children offered this story to our team, they were not merely telling a story, but they were asking us to see them as interlocutors. That is, they sought agency through storytelling. And, when we listened to the story, we accepted the gift of story while offering the gift of our listenership. Through this exchange, this Andean folktale could provide additional insights for how we could engage the community. Stories, like that of Fox and Rabbit can unlock the history, values, and morals of a community; they can articulate culture as a resource. When they are told, stories gain the attention of others and create a community of enjoyment around these topics. When the least powerful members of the community tell the stories, in this case, the stories also allow the emergence of voice and agency. The children in this community not only told us a story they had heard, but hailed us to become listeners to that story.

CONCLUSIONS AND IMPLICATIONS

The children and teachers at this school in Chaquizhca named three components of health that they thought meaningful and worthy of memorialization on the wall surrounding their school. They wanted to promote in their community social health, articulated through the rights of the child, physical health, in the form of healthy sports, and ethical health, as shared in stories of Fox and Rabbit.

These indicators of health reflect, in some ways, common definitions of health, but with variations that make them

meaningful to this community. That is, by responding to the culture-centered approach's call for "creating spaces for cultural voices to make articulations about their health needs," the wall mural project allows children in Chaquizhca to redefine "health beyond the narrow biomedical framework to look at cultural resources that enable health" (Dutta, 2017, n.p.). "The children's focus on healthy sport in interpretable, in part, though the WHO definition of health in that it is a reflection of physical well-being. This reflection emerges from the community in two ways. First, and most obviously, the places and modes in which physical health is manifested through play are painted to place these activities in the community. Second, physical well-being in the WHO indicators list is defined by the presence or absence of communicable and non-communicable diseases and mortality rates (World Health Organization, 2015a). The children and teachers, though, articulated their definition through bodily function—i.e., the ability to perform sport—as a clear indicator of physical well-being. This may connect to the largely agricultural and manual labor valued in the community as well as the need to be able to walk long distances and navigate unsteady terrain, labor and physical environments that focus on a body's ability. For this community, then, function may be a better indicator of a person's physical health than weighing the child on a scale or taking their blood pressure would be. Similarly, social well-being is articulated in the rights of the child and, in part, the ethical health through storytelling. This social health can be put into the WHO's language that social health inequities derive from infringements on fairness and human rights norms World Health Organization (2015b). The WHO recommends that addressing social and economic relationships is one way to promote social health; the community's articulation of these relationships through the rights of the child—both those formally recognized in international law and those articulated within the community—may be a means of seeking social health for children in Chaquizhca. Finally, although the WHO defines mental well-being as a condition where a person "can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (World Health Organization, 2002, p. 1), their operationalization of mental well-being is through scoring standard measures of depression, anxiety, substance abuse, and the like (World Health Organization, 1998). The community in Chaquizhca, however, in articulating a narrative of what makes for a productive and fruitful contribution to the community, and what would be harmful, sidesteps these supposed objective measurements and articulates ethical participation in the community in unexpected, culture-centered ways. We articulate these fits with the WHO definition not to indicate that they reinforce the WHO definition. Instead, we articulate them because these connections may expand on and exceed the WHO definition. As Dutta (2014) might put it, since "Working with the language of the structure is also the site for resisting the language of the structure," when we draw the definition offered in Chaquizhca into the WHO definition, "the vocabulary in the mainstream is altered through the participation of other vocabularies" (p. 77). In doing so, these connections enable us to use the WHO language to exploit the resources of the global North and deliver them to communities in the global South, if and only if the communities we work with ask us to help them exploit these resources.

Collectively, then, these articulations reflect, but modify, the WHO definition of health. This rearticulation demonstrates the utility of Bircher's contextually-bound, multiple interpretations of a definition of health. The localized definition allows access to the potential for physical, social, and mental health commensurate with a culture and its location. Because of the cultural and geospatial terrain of Chaquizhca, the articulation of physical well-being as physical function, social well-being as expressed through the rights of the child, and mental and communal well-being as ethical health through storytelling, we attain a definition of health that is both meaningful and actionable within the community but also interpretable and actionable within the vocabulary of the World Health Organization and other external agencies.

In addition to displaying these values, the community-articulated definition of health in Chaquizhca offers an additional value. Because it is developed from the community, rather than imposed by representatives of the global north, the definition created by the children and teachers at this school is better able to offer an assets-based, culture-centered definition of health rather than a deficit-based, universal definition. The WHO measures physical health, despite claims otherwise, as the presence or absence of death and disease; the community articulated their landscape and school as places and structures that demanded and created physical fitness. The WHO measures of mental health look for lack of mental adaptation to stresses; the community articulated their cultural heritage and stories as providing guidance for dealing with challenging situations. Finally, although the WHO looks for disparities in social health, the community articulated their agency within national international legal structures through a claim to rights they possessed and, therefore, the fundamentals for social well-being.

In addition to these implications for defining health to take advantage of WHO and other structures, the definitions offered in this community offer opportunities for practical action. Following Zoller's (2010, 2012) claims that definitions of health also entail assigning responsibility for ill health and programs of action to seek health, the definition offered by the community in Chaquizhca also offers these implications. Of the three models, offered by Zoller, the community's definition is most like the structural approach. The structural approach, however, is one that is premised on a deficit model, and is not fully compatible with the ABCD or the CCA approaches adopted here. The community's emphasis on rights of the child for social health, physical function for physical health, and honesty and hard work for ethical health also entail programs of action. If social health is injured, the children's articulation of responsibility is to the state and other larger organizations for failing to support their rights and, thereby, entail a social and legal solution. Because of this linkage, one member of our larger project team has begun to more deeply explore how rights are understood and articulated in Chaquizhca and neighboring communities to better activate these solutions. When physical health is absent, the children point to a lack of physical function and their images suggest that geographical factors and school factors are the likely

cause, entailing solutions that are based in infrastructure. In response, our project team has been asked by the community to connect community members with cantonal and provincial authorities to advocate for greater investment in infrastructure in the communities, such as roads, schools, and water systems. Finally, when ethical health is harmed, the children note failures to learn from cultural knowledge that teaches sound values and this entails leveraging resources like the Fox and Rabbit stories, and others, to restore community values. Given this connection, our project team is assisting the communities in recording and preserving a variety of local knowledges, including stories, medicinal lore, and more. These actions—advocating for rights, seeking infrastructure investment, and recording oral histories—may not be traditional health interventions as understood through the definitions of the global north, but they are health interventions when we adopt the definitions that are offered by the community of Chaquizhca and take them seriously as grounds for action in cooperation with the community.

These definitions allow us to emphasize how the community in Chaquizhca can approach health and development differently than in the standard approach. Rather than emphasizing disparities and deficits, the community emphasizes the assets that support health and development. The schools and teachers enable collective advocacy and change, local knowledge is emphasized, and the landscape is transformed from challenge to opportunity. In adopting a contextually-bound and multiple interpretation of health, the community allows us to better serve them and prevents us from imposing an external definition of health that will always already find the community lacking. We encourage other health and development researchers to similarly listen to the definitions offered by the communities they serve.

DATA AVAILABILITY

The datasets generated for this study are available on request to the corresponding author.

ETHICS STATEMENT

This study was carried out in accordance with a protocol approved by the Institutional Review Board at Ohio University. The current study was determined exempt from IRB review because it was judged to be non-systematic and non-generalizable intervention. A community consent protocol was used for this study in which parents and school teachers agreed to allow the children to participate.

AUTHOR CONTRIBUTIONS

BB and DM contributed conceptualization and design of the study. CN-S and DM organized and conducted fieldwork related to the study and the larger project. MG coordinated community involvement and participation from local institutions. BB wrote the first draft of the manuscript. DM, CN-S, and MG wrote sections of the manuscript. All authors contributed to manuscript revision, read, and approved the submitted version.

FUNDING

The Service Learning project from which this paper was derived was supported by Children's HeartLink (Chagas Disease in Loja Ecuador), the Ohio University 1804 Fund for Undergraduate Education and the Center for Campus and Community Engagement (Undergraduate Service Learning Experience in Ecuador), and the Pontifical Catholic University of Ecuador (J13049, K13023, K13037, L13225).

ACKNOWLEDGMENTS

We would like to thank Rudaba Nazir, Philistar Bonyo, and Jessica Gonzalez for their work implementing the wall project within our Healthy Living class. We also thank Liliana Acevedo for helping to capture and illustrate 'The Fox and the Rabbit' story.

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Conflict of Interest Statement: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.