Integrating Social Determinants into Health Workforce Education, Training, and Service Delivery – Technical Guidance Summary

Introduction

The social determinants of health (SDoH), that is, the set of circumstances in which people are born, grow, live, work, and age, drive health inequalities and impact the health, wellbeing, and economic productivity of populations.[1] The distribution of money, power, and resources, influenced by a broad range of policy choices— globally, nationally, and locally—shapes these circumstances.[2] While there is not agreement on the exact level of influence of the SDoH, a review by Donkin et al. suggests that they contribute to between 45 and 60 percent of the difference in health status among different populations within and among countries.[3] To deliver relevant quality care effectively and equitably, the workforce must understand the complex factors and SDoH that impact providers, patients, and communities, and possess competencies aimed at reducing their negative effect.[4,5]

The Local Health System Sustainability Project (LHSS) sought to identify, analyze, and document examples of successful efforts in integrating competencies and practices related to SDoH into health workforce education, training, and service delivery for improved quality of care and equity in health outcomes, with a focus on low- and middle-income countries (LMICs). This activity included a literature review, surveys, resource mapping, case studies including key informant interviews, and the development of a theory of change. This technical guidance document provides a summary of the principal findings of all these activities.

Key findings suggest that there are significant knowledge gaps on integrating SDoH into health workforce education, training, accreditation and quality assurance, and service delivery. Critically, this activity revealed a lack of shared understanding of and approaches to addressing SDoH. There is not yet consensus on SDoH terminology, what the SDoH are, how to mitigate their negative effects, and the role(s) of different actors in addressing those effects. The terms associated with the SDoH are often unclear and therefore interpreted and applied differently. For example, some use the term SDoH to refer to social risk factors, which are "specific adverse social conditions associated with poor health,"[1] such as poor housing and food insecurity. However, SDoH affect all populations, some positively and others negatively. The resulting array of models, approaches, and theories create ambiguity around how to address the SDoH. This lack of consensus may hinder effective research, practice, and analysis, and mislead policy makers, planners, program designers, and health workers.

Yet, findings suggest a consensus among stakeholders on the importance of health workers possessing SDoH-related competencies to improve the quality and equity of care. There are examples from high-income countries (HICs) and LMICs where SDoH have informed both institutional and instructional strategies and the curricular content of health workforce education institutions.[6,7] These strategies incorporate SDoH into the education and training of health workers throughout the curriculum. They provide learners with opportunities to work in and with communities facing the negative effects of unaddressed SDoH. In addition, the institutions themselves and their learners and graduates work closely with partners across health cadres and sectors to co-identify and co-address the SDoH with communities. LHSS also found interventions that assist health workers to identify SDoH-related barriers and mitigate their effect on quality of care and health equity in underserved populations.

While more research is needed to understand the influence of individual institutional and instructional factors related to integrating SDoH into programs, evaluation of the impact of such community-engaged SDoH-oriented institutions suggests that integrated SDoH-informed strategies can improve the relevance and quality of care and reduce health inequities.

Methodology

LHSS had the following broad objectives:

1. To review key literature on the integration of the SDoH competencies in pre-service and in-service health workforce education, accreditation and quality assurance, and clinical service delivery, and the impact of that on quality of health care and equity in health outcomes in LMICs.

2. To explore the views of key informants, particularly those engaged in health professions education and clinical training, and accreditation/quality assurance, about the implementation of SDoH competencies and the impacts of these competencies on quality of health care and equity in health outcomes in LMICs.
3. To identify promising design, delivery, and institutional practices, and key lessons and best practices, for the development of a theory of change and a technical guidance document for developing and applying SDoH competencies in pre-service education, in-service training, and service delivery. The intent would be to improve quality of health care and equity in health outcomes in LMICs.

In order to achieve these objectives, LHSS undertook the following tasks:

LHSS conducted a scoping review to determine the range of evidence describing education approaches and tools for integrating SDoH in pre- and in-service education, clinical training, and service delivery, and a traditional literature review to identify how SDoH are reflected in accreditation and/or quality assurance standards.

The team then administered two online surveys in English and French to 75 faculty and clinical supervisors and 118 learners in eight African countries and three Asian countries.

LHSS also conducted three country case studies—pre-service health workforce education in Nepal, nursing competencies in Eswatini, and service delivery in Côte d'Ivoire—using semi-structured interviews and reviewing published and other available documents.

The learnings from the tasks were used to inform the development of a theory of change.

Key Findings

Theory of Change

Given the complexity of the causes and effects of the SDoH, and the multitude of stakeholders and interventions needed, creating a Theory of Change (ToC) can help those seeking to develop interventions to identify, address, and mitigate the negative effects of the SDoH on health. This would help stakeholders explore causal pathways to change and identify necessary inputs, outputs, outcomes, and conditions needed to achieve specific goals. It would also help identify underlying assumptions and needed interventions and identify who needs to be involved in identifying problems and crafting solutions. A ToC should be a context-specific, living document that guides evaluations but may also need to be adjusted to reflect new evidence or understanding. Addressing the SDoH is highly context-driven, and each institution, community, region, or country will need to adapt their ToC, strategies, and stakeholder engagement to their local context. The ToC LHSS developed based on the literature review, surveys, and case studies, and had reviewed by experts from LMICs, focuses on key interventions related to building the capacity of the health workforce to address or mitigate the negative effects of the SDoH.

SDoH Competencies

The LHSS literature review found limited evidence of global agreements on a set of SDoH-related core competencies for pre-service health workforce education, in-service training, or continued professional development. There is a lack of consensus on what is considered an SDoH, how to mitigate the negative effects of SDoH, and the role(s) of different health sector actors in addressing those effects. Terms associated with SDoH are often "misunderstood, conflated and confused,"[8] and therefore interpreted and applied differently. The resulting array of models, approaches, and theories creates ambiguity around policies, programs, and measurement.[9]

Given the lack of evidence, LHSS conducted a brief health workforce educator and learner survey to examine participants' understanding of SDoH, how they were addressed in curricula, and their perceived impact on quality and equity of care. While suggesting there is some agreement on competencies, findings indicate a need to clearly define SDoH-related competencies and ensure they are integrated into health workforce education and training. For example, while 94 percent of learners and 89 percent of educators agreed that "understanding how individuals, organization and professional cultures, world views and beliefs affect the assumptions and behaviors of patients and practitioners" is an SDoH competency, less than three-quarters of the learners reported learning about this in class.

The SDoH competency with the lowest agreement scores among both learners and educators was "demonstrates an awareness of personal bias toward people from different backgrounds, race, gender or population groups and applies this knowledge when interacting with others." Only 76.8 percent of educators and 44.6 percent of learners reported teaching/learning about it in class. Interestingly, fewer than half the learners rated conflict and violence, and race and ethnicity, as SDoH-related concepts. Concerning beliefs about the population groups whose health status is most likely to be affected by social determinants, low socioeconomic status, rural, or remote groups are considered most vulnerable by learners and educators alike. Notably, both groups perceived ethnic and indigenous groups and urban dwellers as least affected.

Findings from both the literature review and surveys suggest the need to examine how competencies are identified and taught, clearly identify learning objectives, and ensure these objectives are aligned with local needs and service delivery contexts.

SDoH in Health Workforce Education and Training

In LHSS's surveys 69.9 percent of educators reported introducing SDoH into their courses, with 30.4 percent reporting they had not or were unsure. Eighty percent of learners reported learning about SDoH during pre-service or postgraduate education, with some learners, mainly in the first three years of training, reporting no exposure to SDoH. Just over 30 percent of educators reported that they have not been, or are unsure whether they were, personally introduced to SDoH competencies. Eighty-seven percent said the SDoH were integrated into learning about specific topics, such as women's health, community health, and noncommunicable diseases, while 13 percent said they were taught in a separate course.

Nearly all studies included in the literature review referenced more than one learning method, with 44 percent describing service-learning in community settings.

The review identified enablers and barriers for effective education and training programs on SDoH. Effective approaches included components such as community-based learning and linkages to community-based organizations. Cost, inadequate supervision and mentoring, and lack of structure in clinical placement programs limited the impact of training programs. Another limiting factor mentioned in a study in India was the lack of systematic data collection related to SDoH and of available information to guide strategy and program development.[9] In the LHSS survey respondents identified barriers to the full integration and application of SDOH in training and in service delivery. These included time and resources constraints, lack of buy-in from educators and health professionals, staffing shortages, poor practical training components, collaboration and partnership failures, poorly planned curricula, poor supervision, poor remuneration of supervisors, and lack of training of educators.

Box 1: Key best practices for developing and implementing SDoH curricula from Nepal Case Study:

- Develop a clear mission, philosophy, and desired outcomes, built on a community- and patient-centered focus, based on available evidence and promising practices locally and globally. This should be aligned with local needs and contexts, using an iterative stakeholder engagement process to design and implement curricula and programs.
- Engage key stakeholders within and beyond the health sector, including health professional bodies, consumer groups, policy makers, health managers, and learners, as well as national and international academic experts. Engage representatives of communities that have been discriminated against or marginalized by the health system, in defining attributes and competencies, designing and implementing programs, and evaluating learners' performance.
- Program and school leaders should ensure that faculty internalize the importance of SDoH as a cross-cutting issue in the curriculum, and sustain their commitment by providing training, sharing evidence, providing concrete examples, regularly engaging with faculty, and drawing on their personal experiences.
- Ensure that the curriculum provides learners with ample experience in living and practicing in underserved areas and working at each level of the health system, coupled with a strong focus on developing related competencies.
- Regularly review the curriculum in collaboration with stakeholders, including students and communities, reflecting on whether the program is on track, and adjusting the program as needed.

The case study of Patan Academy of Health Sciences in Nepal highlighted the importance of partnering with communities and other stakeholders to successfully integrate SDoH throughout the curriculum—lack of resources and resource-constrained settings notwithstanding. (Refer to Box 1.)

Most studies measured the outcomes of education and training in terms of learning outcomes. Both the review and the surveys indicated a lack of implementation research and systematic assessment of the impact of SDoH interventions on clinical practice and patient outcomes.

Impact of Integrating SDoH Approaches into Education and Training on Practice

When asked whether SDoH education/training was likely to improve the quality-of-care learners provide, 95.7 percent of educators surveyed said yes and 72.3 percent thought that SDoH training prepares learners to address health inequities. LHSS analyzed the links between different competencies to explore the potential effect of teaching specific competencies. For example, there was a significant, moderate correlation between "demonstrates an awareness of personal bias toward people from different backgrounds, race, gender or population groups and applies this knowledge when interacting with others" and "empowers and mobilizes patients and communities to take charge of their own health and become aware of their rights." This may suggest that self-awareness facilitates a more patient-empowered approach to care and supports patient agency. There was also a significant, moderate, positive correlation between "incorporating the perspectives of individuals, caregivers, families and communities in decision-making" and "provides culturally sensitive, respectful and compassionate care," and "empowering and understanding and applying knowledge on specific barriers for underserved populations to access services and adhere to treatment plans."

"During the COVID response we worked in the most remote and poor areas of the country. Compared to graduates from other schools, I was much better prepared. The others had problems with communicating with illiterate people. … SDoH are very important for quality of care. When one realizes it, you deliver services very differently." – Medical Graduate of Patan Academy of Health Sciences working in rural hospital

This may indicate that the more inclusive the perspectives in the design and delivery of health education and health care are, the greater the likelihood of learners making health care decisions that are sensitive to people and to communities, and inter alia, improving access to quality and relevant care.

In the literature review, while community engagement appeared as a pedagogical intervention, it also emerged as a strategy at some education institutions. This means that the education institutions established long-term partnerships with community-based groups including non-profits, community leaders, legal groups, and community-based clinics. The community partners provided input into the design, implementation, and evaluation of educational interventions and programs. These efforts often resulted in SDoH-related elements being reflected throughout the education programs in how the education institutions operated, and in how institutions evaluated outcomes. For example, the review identified two institutions in the Philippines that apply such strategies. Both recruit learners with the goal of increasing deployment and retention in underserved regions. One selects learners from underserved communities and the other uses metrics to identify learners with the personality traits such as compassion and empathy as well as commitment to work in underserved communities. Both institutions include community members in the selection. Learners at both institutions spend up to half of their clinical learning time in poor rural communities, where they gain practical understanding of SDoH and work with communities to address their negative effects. A nonrandomized, controlled study investigated the impact of learners and graduates from these socially accountable health professions education institutions on child and maternal health services and outcomes. After adjusting for socioeconomic status, recent mothers in communities served by socially accountable health professions education learners and graduates were more likely than mothers and children in communities served by conventional (non-socially accountable health professions education) graduates to receive all USAID-recommended prenatal, newborn, and postnatal examinations, measurements, and immunizations.

Box 2: Outcomes and impact of integrating SDoH into practice and program from case study in Côte d'Ivoire:

- Reported increased access to HIV testing, as well as other social and financial services. Interviewees cited increased financial autonomy of clients through businesses and other income-generating activities supported by the initiative. The initiative has also created a significant increase in demand for pre-exposure prophylaxis, condoms, and other preventive services.
- Reported delay among young girls' first sexual experience, and/or increased adoption of safe sex practices because of early social sensitization.

SDoH Interventions in Practice

Articles describing how the negative effects of SDoH are mitigated in service delivery settings range widely. They include efforts to mobilize community health workers and community leaders to gather data; the use of SDoH screening tools; and organization-level, equity-oriented strategies applied in primary care settings to serve marginalized populations. The literature review's main finding suggests that interventions should be designed for the specific context and aligned with the needs of the populations served describing how everything from clinic set-up and opening hours to available services were designed with target or specific vulnerable populations in mind.

Other SDoH-oriented strategies include establishing ongoing partnerships with local community groups, and other stakeholders; using clinical experiences and research to bring attention to the health impacts of social challenges; advocating for policy changes; conducting community needs assessments and health planning activities; and engaging with communities to tackle social challenges that become entrenched in social norms, such as gender-based violence.[10]

The review's second main finding suggests that SDoH screening tools are useful during routine assessments in clinical settings but need to be backed up by the availability of services that address patients' needs and challenges. Some tools seek to identify specific risks such as food insecurity, violence, stress, childhood trauma, housing conditions, and poverty. There are also tools for different settings such as emergency departments and operating rooms and screening tools that focus on specific populations such as pregnant women, children, people with diabetes, veterans, and older people.

For example, the U.S. President's Emergency Plan for AIDS Relief's Determined, Resilient, Empowered, AIDS-free Mentored, and Safe (DREAMS) program targets adolescent girls and young women. To identify particularly vulnerable girls and young women to enroll in DREAMS, implementers used screening tools that looked at SDoH such as whether they were in school or falling behind in school, whether they had multiple sex partners or had children. DREAMS interventions include regular

meetings to discuss how health workers in clinical settings can mitigate the effect of SDoH. At the patient level, health workers can consistently and empathically enquire about social history and challenges, offer advice, and facilitate access to local support services as part of routine assessments. It is important that health care providers also reflect on the extent to which their own clinical settings, personal actions, and perspectives entrench broader social prejudices and stereotypes against specific groups of health seekers. [11,12,13] (Refer to Table 1 and Box 2.)

Several studies reported on the outcomes of using screening tools. Garg et al. (2015)[13] reported that parents who participated in SDoH screening during regular child health care visits were more likely to receive referrals, more likely to contact a community resource, more likely to access a community resource, and more likely to obtain employment or enroll in job training after referrals. Screened children were more likely to be enrolled in childcare, and screened families with children were more likely to receive fuel assistance and less likely to remain in a homeless shelter.

Literature review findings also suggest that working with community-based organizations and community health workers can facilitate effective SDoH-related interventions at community levels. Working with community-based organizations was cited—along with access to social resources and social workers—as a key enabler in incorporating SDoH into clinical practice settings.[14]

Table 1: DREAMS Côte d'Ivoire: Roles of various participants

Adolescent girls and young women (10–24 years of age)	Clients/primarily participants accessing the health and social services/intervention packages.
Health workers	Provide HIV prevention and counseling services to DREAMS clients referred to facilities by mentors; and initiate referrals to DREAMS services based on SDoH factors observed during service delivery.
Parents	Participate in program that promotes effective communication and a positive relationship with their children. There are also opportunities for parents to participate in income generating activities to strengthen the family economically.
Community members, including community and religious leaders and associations	Participate in community mobilization efforts targeting harmful social norms and practices that increase HIV risk for AGYW to facilitate broader behavior change.
Mentors	Screen vulnerable AGYW for DREAMS participation; facilitate tailored and needs-based HIV prevention and social services; and build relationships with the AGYW to share information as well as offer assistance and emotional support to build their social asset.

Key barriers to implementing SDoH-related interventions in clinical settings in both HICs and LMICs include a lack of time with each patient, a lack of training on SDoH and effective communication, discomfort with screening, and a lack of social support resources or knowledge of community-based or other social resources [14, 15, 16, 17]

> "There is no quality of care unless we attend to the social determinants of health—their background, the demographics, and so on."
> –Education expert, May 2022

SDoH in Accreditation, Quality Assurance and Quality Improvement

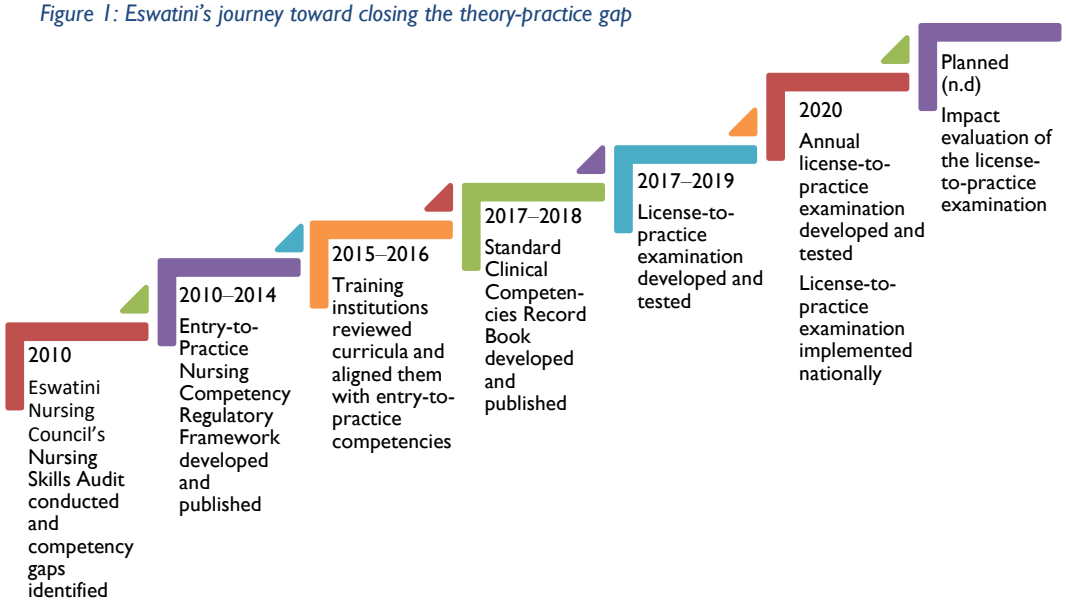
Accreditation and quality assurance mechanisms can play a pivotal role in ensuring that health workforce education and continuing professional development competencies address the health and social needs of populations and communities. The 2010 Lancet Commission on the future of health professions education found many accreditation systems to be weak and called for such systems to ensure that the competencies of graduates were in greater alignment with the needs of the societies they served. The literature review suggests that progress on the ground has been somewhat limited, and that without clearly defined competencies to help health professionals identify and address the needs and risks related to SDoH, vague accreditation standards are not likely to have significant impact.

The review found limited information on accreditation and quality assurance standards or monitoring that referred to SDoH competencies in LMICs, and only a few general references mentioning the need to understand the effect of SDoH in HICs. However, increasingly competency-based education standards developed by professional organizations refer to SDoH or are in the process of developing standards related to SDoH. Ensuring the quality of education through accreditation is a challenge in many LMICs, and our review found that many education and training programs are not accredited. In one of 16 African countries, 56 percent of survey respondents suggested that lack of financial resources in their country was a barrier to effective quality assurance through accreditation, and 44 percent cited lack of technical expertise and material.[17]

The review found that ensuring that health systems deliver equitable and quality care for underserved populations requires cross-sectoral, systems-level efforts and action on SDoH at primary care levels.[18] Addressing the effects of SDoH is also increasingly deemed essential to improving care for individuals with complex health conditions, and therefore SDoH need to be incorporated into quality improvement efforts. [19, 20, 21]

LHSS's Eswatini case study analyzed the Eswatini Nursing Council's efforts to better address the population's health needs by introducing entry-to-practice nursing competencies as the basis for a national licensing examination and incorporating SDoH into these competencies. The Eswatini Nursing Council's rigorous, stakeholder-engaged, and successful process offers insights for other countries of similar contexts aiming to bridge the theory-practice gap by aligning competencies with health needs and SDoH.

Figure 1: Eswatini's journey toward closing the theory-practice gap



Recommendations

The literature review revealed significant gaps in knowledge about the degree to which SDoH are covered in the health workforce curricula globally and how they are incorporated into education and training in LMICs. There are similar gaps in research and knowledge on integrating SDoH interventions into service delivery in LMICs.

However, there is overwhelming evidence on the need to mitigate the negative effects of SDoH to improve health outcomes and optimize scarce resources, and promising practices from LMICs and underserved communities in HICs.

To better integrate SDoH into health workforce education and training, accreditation, and quality assurance standards, and to better address the negative effects of these social determinants through service delivery, LHSS makes several recommendations:

- Clarify SDoH terms, roles, and intervention objectives. Those designing interventions should work with key stakeholders (including patient groups and communities) to clarify what is meant by each term and to delineate realistic goals and objectives for interventions.
- Develop regional if not global agreement on the SDoH competencies, with illustrative examples of how inequities, in the form of socioeconomic and health indicators and sub-indices, might manifest in different cultural and social contexts and population groups.
- Engage key stakeholders from across sectors including communities to identify SDoH challenges and develop solutions and foster inclusive, collaborative approaches to designing education programs for pre-service and in-service training as well as facility- and community-level interventions.
- Incorporate SDoH factors into equity-focused standards and quality improvement processes, such as root cause analysis to understand the underlying drivers of the inequities and methods for improving access to better-quality health care. This approach requires a deliberate focus on SDoH, and the context patients and communities live in, and research to identify and design interventions likely to optimize resource use while improving equity and quality of care for vulnerable populations.
- Invest in improving the capacities of health facilities and workers already in practice to address and/or mitigate the negative effects of SDoH to optimize resource allocation in the provision of more-equitable and higher-quality care.
- Integrate learning and teaching about the SDoH early into the curriculum, semester on semester, accompanied by exercises for developing self-awareness, systems-awareness, and cultural awareness of biases affecting the design and delivery of quality, patient-oriented care.
- Create strong service-learning partnerships for longitudinal service placements so that all key stakeholders including beneficiaries participate in co-creating effective learning environment and interventions.

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