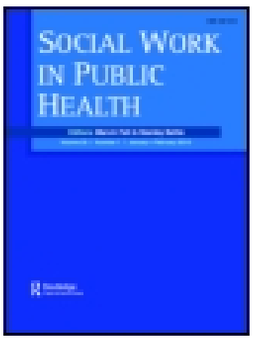

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Contact Tracing: An Opportunity for Social Work to Lead

Abigail M. Ross[a], Lisa De Saxe Zerden[b], Betty J. Ruth[c], Jennifer Zelnick[d], and Julie Cederbaum[e]

[a]Graduate School of Social Service, Fordham University, New York, New York, USA; [b]School of Social Work-Chapel Hill, University of North Carolina, Chapel Hill, North Carolina, USA; [c]School of Social Work, Boston University, Boston, Massachusetts, USA; [d]Graduate School of Social Work, Touro College, New York, New York, USA; [e]Suzanne Dworak-Peck School of Social Work, University of Southern California, Los Angeles, California, USA

ABSTRACT

Since the novel coronavirus disease (COVID-19) first emerged in December 2019, there have been unprecedented efforts worldwide to contain and mitigate the rapid spread of the virus through evidence-based public health measures. As a component of pandemic response in the United States, efforts to develop, launch, and scale-up contact tracing initiatives are rapidly expanding, yet the presence of social work is noticeably absent. In this paper, we identify the specialized skill set necessary for high quality contact tracing in the COVID-19 era and explore its alignment with social work competencies and skills. Described are current examples of contact tracing efforts, and an argument for greater social work leadership, based on the profession's ethics, competencies and person-in-environment orientation is offered. In light of the dire need for widespread high-quality contact tracing, social work is well-positioned to participate in interprofessional efforts to design, oversee and manage highly effective front-line contact tracing efforts.

KEYWORDS

Social work; public health; contact tracing; COVID-19

Introduction

Since the novel coronavirus disease (COVID-19) first emerged in December 2019, there have been unprecedented efforts worldwide to contain and mitigate the spread through evidence-based public health measures. As the United States (US) grapples with COVID-19, its sequelae, and the health inequities it further exposes, all professions, including social work, must wrestle with the challenges it poses (Walter-McCabe, 2020). Social work's involvement in epidemic response and recovery is not new: for more than a century, social work has been an important component of the public health workforce and collaborated extensively in this arena (Ruth & Marshall, 2017). Equally important, contemporary social work is deeply involved in health and health care. Almost half of the nation's roughly 700,000 social workers work in a broad range of health and health care roles. The remaining workforce is involved in promoting health and well-being in child welfare, housing, school social work, veterans and military services, and forensic social work (Ruth, Wachman, & Marshall, 2019). Yet, despite its history, breadth of involvement in health, and ongoing involvement in addressing upstream issues related to the social determinants of health (SDOH; National Academies of Science, Engineering and Medicine [NASEM], 2019), the profession's role in epidemic response remains generally under-acknowledged. In particular, the role of social work in contact tracing is largely unexplored. This paper highlights the synergy between contact tracing efforts and social work practice by first identifying the specialized skill set necessary for high quality contact tracing in the COVID-19 era and subsequently exploring its alignment with social work competencies and skills. Examples of

CONTACT Abigail M. Ross aross28@fordham.edu Graduate School of Social Service, Fordham University, New York, NY 10023

current contact tracing efforts are described, and the argument for social work leadership, based on the profession's ethics, competencies and person-in-environment orientation, is offered. In light of the dire need for widespread high quality contact tracing, social work is well-positioned to lead and/or participate in design, oversight, and management of front-line contact tracing efforts.

The COVID-19 pandemic response

While the COVID-19 pandemic has been experienced on a global scale, there is substantial variation in the degree to which countries around the world have been affected. Some countries, including New Zealand and South Korea, have been able to contain the spread of COVID-19 through expeditious and aggressive national efforts involving investments in stringent – yet highly effective – public health measures that include pandemic management practices designed to prevent community transmission (Thompson, 2020). In addition to highly coordinated governmental responses that include universal testing, prompt contact tracing, and subsequent quarantine/isolation (Walensky & Del Rio, 2020), measures taken to facilitate strict social (physical) distancing (e.g., closures of schools and non-essential workplaces, social gathering bans, and travel restrictions) have effectively eliminated disease spread in these countries (Marais & Sorrell, 2020).

In the US, the federal government's reluctance to act early and with a coordinated response facilitated rapid and exponential community spread of COVID-19 (Pei, Kandula, & Shaman, 2020). This lack of swift and decisive action rendered the US unable to limit viral exposure and transmission during the "containment" phase of this pandemic (Pei et al., 2020). Current efforts to "flatten the curve" and contain community spread are now focused on mitigation – a series of strategies designed to slow the further spread of the virus and reduce anticipated surges in health care use (Parodi & Liu, 2020). Mitigation efforts also rely on non-pharmaceutical interventions such as travel restrictions, closures of schools and non-essential businesses, and policies that facilitate social (physical) distancing – all of which must be highly coordinated to be effective (Pan et al., 2020). While disruptive and inconvenient, social (physical) distancing was effective in both reducing and delaying peak infection rates and mortality in the 1918 influenza pandemic (Tomes, 2010). Despite these efforts, the US federal response has been characterized as "inconsistent and incoherent" by world-renowned scientists (The Lancet Editorial Board, 2020). Federal mitigation efforts have been stymied by inadequate preparation and planning, ongoing resource mismanagement, and inadequate testing access, resulting in a national catastrophe. As of this writing, the infection rate in the US has topped 1.6 million – accounting for nearly 30% of infections worldwide – and the death toll has just surpassed 100,000 (Johns Hopkins University, 2020a). New research suggests that as many as 54,000 lives may have been saved had the US implemented coordinated social (physical) distancing measures just two weeks earlier (Pei et al., 2020).

Consistent with the overwhelming evidence of racial disparities in other health outcomes across the US (Braveman et al., 2011; Meyer, Yoon, & Kaufmann, 2013; Woolf & Braveman, 2011), communities of color nationwide disproportionately bear the burden of coronavirus morbidity and mortality, with disparities most markedly affecting the African American community (APM Research Lab, 2020; Yancy, 2020). In Chicago, where a third of the city's population is African American, early data indicate that African Americans comprise nearly 50% of those diagnosed with coronavirus (Reyes, Husain, Gutowski, St Clair, & Pratt, 2020). The disparate effect is more pronounced in Louisiana, a state in which 70% of fatalities linked to COVID-19 have been among Black people, who represent only 32% of the state's population (Russell & Karlin, 2020). In New York City (NYC), people in Black and Latinx communities are dying at twice the rate of their White counterparts (Luce, 2020). Findings from a study compiling data from 40 states and Washington D.C. show that the overall COVID-19 mortality rate for Black Americans is 2.4 times the rate for Whites and 2.2 times as high as the rates in Asians and Latinx populations (APM Research Lab, 2020). While an aggregated mortality rate was not able to be calculated for Native Americans across all states due to limited data, estimates from Arizona and New Mexico, home to a large portion of Navajo Nation, show that the COVID-19 mortality rate is

more than five times that of all other groups (Arizona), and exceeds other rates by a factor of seven (New Mexico; APM Research Lab, 2020).

Rates of underlying chronic diseases that elevate risk for development of a severe case of COVID-19, such as diabetes, heart disease, and high blood pressure, have historically been higher in racial/ethnic minorities as compared to their White counterparts (Centers for Medicare & Medicaid Services, 2017; Lackland, 2014). These and other disparities are rooted in the SDOH, defined as the conditions in which people live, learn, work, and play, that affect a wide array of health risks and outcomes and disproportionately affect racial/ethnic minorities (Healthy People, 2020). In addition to exposing weaknesses in the US health care system beyond known disparities in access to and quality of care (e.g., Clarke et al., 2013), COVID-19 exacerbates existing inequities in SDOH related to housing stability, access to health and social care, living and working conditions, and food security, among others. For example, residents of crowded public housing (who are disproportionately racial/ethnic minorities) may be less able to adequately practice social (physical) distancing, which may in part explain the COVID-19 hospitalization rate that is 30% higher in public housing zones (Velasquez, Choi, Aponte, & Olumbhense, 2020). Further, workers in low-wage jobs are exposed to the coronavirus through essential services in health care settings, grocery stores, postal and mail delivery, and transportation services, all exempted from state stay-at-home orders. Black Americans are more likely than White Americans to work in these settings (Hawkins, 2020) and in New York City (NYC), Black and Latinx individuals account for more than 60% of the NYC Metropolitan Transit Authority (MTA) workforce (MTA Diversity Committee, 2017). Structural discrimination has also contributed to disparities, with imprisoned and undocumented populations bearing a disproportionate burden (Page, Beyrer, & Polk, 2020; The Marshall Project, 2020).

In the absence of federal leadership, regional, state, and local level entities have taken initiative to develop and manage critical pandemic response tasks in their own geographically defined areas. In particular, many states and large cities have begun to develop and launch their own testing and contact tracing programs, two key public health activities integral to mitigating the spread of COVID-19. Contact tracing, described in detail within this article, is a core century-old disease control measure used to systematically identify individuals who may have come into contact with a person who has an infectious disease. The premise is that, when an infected individual's contacts can be traced, they can then be tested and treated (if necessary), to help reduce infection across populations (Centers for Disease Control (CDC), 2020).

Contact tracing: an overview

Considered to be a central public health response to infectious disease outbreaks, contact tracing is a component of a larger series of activities designed to support patients with suspected or confirmed infection, especially in the early stages of an outbreak when treatments are limited (Keeling, Hollingsworth, & Read, 2020). In the US, contact tracing is a component of the Ten Essential Public Health Services framework, which describes the work of public health across its many functions: health assessment, policy development and assuring health. Contact tracing involves multiple aspects of the Ten Essential Services; it is a key component of health monitoring and disease surveillance and health education; it mobilizes community partnerships with the goal of informing and educating the population on health issues; and where needed, it links people to health services (Turnock, 2016). Identified as a key strategy for preventing further spread of COVID-19 (CDC, 2020), the goal of contact tracing is similar to that of social (physical) distancing: to reduce the number of individuals that each person with COVID-19 infects (R_0), creating an "effective reproduction number" (R_t) of less than 1 (Inglesby, 2020). When R_t is equal to/or less than 1, an infection curve has been either "flattened" or has turned downward. While contact tracing is typically most effective in early stages of disease outbreaks, it will be a critical component of mitigation efforts in the US and worldwide.

Contact tracing is a standard public health practice for reducing disease transmission and has been used worldwide to effectively curb transmission of communicable diseases of tuberculosis (TB),

Table 1. Core principles and tasks of contact tracing (CDC, 2020).

Principle	CDC Identified Task
Communication	Public health staff work with a patient to help them recall everyone with whom they have had close contact during the timeframe while they may have been infectious
Outreach/Education	Public health staff then warn these exposed individuals (contacts) of their potential exposure as rapidly and sensitively as possible.
Ensuring Privacy	To protect patient privacy, contacts are only informed that they may have been exposed to a patient with the infection. They are not told the identity of the patient who may have exposed them.
Education and Support	Contacts are provided with education, information, and support to understand their risk, what they should do to separate themselves from others who are not exposed, monitor themselves for illness, and the possibility that they could spread the infection to others even if they themselves do not feel ill.
Education	Contacts are encouraged to stay home and maintain social distance from others (at least 6 feet) until 14 days after their last exposure, in case they also become ill.
Skill-Building: Self Monitoring	They should monitor themselves by checking their temperature twice daily and watching for cough or shortness of breath.
Skill-Building: Self Assessment, Notification and Self-Referral	Contacts who develop symptoms should promptly isolate themselves and notify public health staff. They should be promptly evaluated for infection and for the need for medical care.
Follow Up	To the extent possible, public health staff should check in with contacts to make sure they are self-monitoring and have not developed symptoms.

vaccine-preventable infections (e.g., measles), blood-borne infections, and sexually transmitted infections (STIs), among others (e.g., Armbruster & Brandeau, 2007; Danquah et al., 2019; Dara et al., 2020; Enanoria et al., 2016; Hanrahan et al., 2019). Recent literature has shown that contract tracing has already been effective in controlling COVID-19 transmission in Wuhan, China (Bi et al., 2020). In the US, many states have laws governing mandatory sexual partner notification, a form of contact tracing, of specific STIs such as HIV, as it is critical for at-risk individuals to receive HIV counseling, testing, and appropriate medical care. Importantly, it was contact tracing that was critical to the eradication of smallpox in 1980 (Fenner, Henderson, Arita, Jezek, & Ladnyi, 1988). Although a smallpox vaccine was developed in 1796, eradication was *not* achieved by universal immunization; rather, it was eradicated through exhaustive contact tracing to locate all infected individuals, isolate/quarantine them for a three-week period, and selectively immunize, when possible, those within the surrounding community, as well as those at risk of contracting the disease (Scutchfield & Douglas, 2003).

While the prognosis and treatment trajectory of a COVID-19 diagnosis may be substantially different from that of smallpox, the core contact tracing principles and tasks remain the same. Although there is variability in contact tracer staffing qualifications, supervision, and follow up communication protocols (due to local-level resources availability and capacity), almost all contact tracing efforts adhere to a series of core principles designed to maximize patient confidentiality, enhance an individual's capacity for safe isolation/quarantine, and reduce transmission of disease (Centers for Disease Control, 2020). As shown in Table 1, core tasks in contact tracing span domains of communication, outreach, maintenance of privacy and confidentiality, provision of disease-specific education and associated precautions, and skill-building with "contacts", or individuals who may have been exposed to the communicable disease in question.

Social work's historical involvement in contact tracing

Social work involvement in contact tracing began in the early 20th century as part of collaborative efforts to address infant mortality, TB, and venereal disease; in each of these epidemics, social workers engaged in identification of new cases in the community and social care provision (Ruth & Marshall, 2017). By the early 1920s, social work was integrated into the United States Public Health Services (USPHS) where its valuable work in case-finding, consultation, and health promotion was continued, and additional roles in addressing heart disease and mental illness were added (Ruth & Marshall, 2017). The public health skills of social workers were highly valued in postwar America. During this

time, social workers expanded their roles to include other emergent health issues, such as disaster response, child maltreatment, and HIV/AIDS. While concepts and approaches to contact tracing differed in each of these epidemics, social work expanded its public health remit by engaging in case-finding, early intervention, and harm reduction (Ruth et al., 2019). Due to its longstanding involvement in public health, particularly in response to critical health needs, the profession arrives at the COVID-19 moment, with essential public health skills in hand (Kerson & McCoyd, 2013).

Contact tracing and COVID-19: state and local efforts

The highly communicable nature and unprecedented speed at which COVID-19 continues to spread in the US underscores the need for a comprehensive accessible, adequate, and affordable testing in conjunction with a national contact tracing program. However, in the absence of federal intervention, many state and local entities have undertaken quick-response efforts to develop, launch, and massively scale up testing and contact tracing programs. Dozens of states – including Alaska, California, Massachusetts, New York, and North Carolina – have begun to hire and train COVID-19 contact tracers en masse, with the goal of getting as many contact tracers up to speed and actively working as quickly as possible (Walters, 2020).

To rapidly implement COVID-19 testing and contact tracing programs at scale, most city and state governments have developed partnerships with non-governmental organizations and other entities that possess specific resources, including experience and expertise with large scale deployment of contact tracing programs. Massachusetts was the first US state to invest in a contact tracing program, allocating 44 USD million to the Massachusetts COVID-19 Community Tracing Collaborative (CTC; Bebinger, 2020). The CTC is comprised of a four-group partnership: the Massachusetts COVID-19 Response Command Center, the Massachusetts Department of Public Health, the Commonwealth Health Insurance Connector Authority, and Partners In Health (PIH), a non-governmental global health organization that works with local governments worldwide to strengthen public health infrastructure, provide direct patient care, and train the local health care workforce (Partners in Health (PIH), 2020). PIH brings 30 years of experience in addressing the epidemics of HIV, drug-resistant TB, Ebola, Zika, and cholera across the world (PIH, 2020). In this cross-systems model, PIH coordinates closely with the Massachusetts Department of Public Health, and other agencies within the Executive Office of Health and Human Services (EOHHS), to train and deploy a contact tracer workforce that will attempt to reach individuals who have been in close contact with confirmed COVID-19 patients.

Training, staffing and supervising the Massachusetts contact tracing workforce is overseen by PIH's medical doctors; the initiative has hired contact tracers, a position which requires a minimum of high school equivalency; case investigators, who supervise more complex cases, and resource coordinators, who arrange concrete support (e.g., housing, food) if needed, to enable a safe and successful quarantine/isolation period of 14 days. While social workers have been among those hired into case investigator and resource coordinator roles, it does not appear that MSW or BSW degrees were required or preferred. Similarly, the initiative has not yet established any mechanism to staff contact tracer positions with community health workers (CHWs), who frequently work with social workers and other health care providers in community outreach, engagement, and health-related activities (Spencer, Gunter, & Palmisano, 2010). Since launching in Massachusetts, PIH has partnered with governments of California, Illinois, North Carolina, Ohio, and the city of Newark, New Jersey and launched the US Public Health Accompaniment Unit to assist with replicating the Massachusetts model (PIH, 2020).

At the local level in NYC – the epicenter of the US outbreakas of this writing – the umbrella of testing, contact tracing, and treatment efforts are housed primarily within and coordinated by NYC Health + Hospitals (NYCH+H), the largest public health care system in the US, through a collaboration with the Mayor's Office and the NYC Department of Health and Mental Hygiene (DOHMH; Katz, 2020). Although this represents a departure in organizational structure from previously successful contact tracing efforts run by DOHMH, the Mayor's Office indicated that a shift was

required because, as a public benefit corporation, NYCH+H can facilitate contact tracers hiring and onboarding more rapidly than the city department (New York Times Editorial Board, 2020). Training of city-level contact tracers will be consistent with other programming across the state through a collaboration with Johns Hopkins University Bloomberg School of Public Health. This training includes an online contact tracing course that is free and available to the public and it will be used to develop the contact tracing workforce (Johns Hopkins University, 2020b). In addition to core contact tracing tasks (see Table 1), the course contains content on active listening, building rapport, question sequencing, and other skills for effective communication, all of which are also core social work skills (Lishman, 1994; Reith Hall, 2019; Vass, 1996).

Current contact tracing initiatives are responding to urgent needs and aligned with traditional principles which prioritize the rapid and immediate scale-up of such efforts. This is necessary given the speed at which COVID-19 is spreading, but has resulted in a phenomenon known as "building the plane as it is flying". As a result, it is difficult to know whether a specific role for social workers, who are well-positioned and professionally equipped to be on the front-lines of contact tracing efforts, has been considered within the current initiatives. Undoubtedly, contact tracing will expand and be enhanced as the pandemic continues. Because social workers are trained as systems thinkers and are highly skilled at marshaling community resources on behalf of patients and populations, it makes sense for social work professionals to be integrated into contact tracing efforts that are currently underway. From engagement in direct patient interactions inherent to culturally-responsive contact tracing, to program design and development that can meet the needs of the most vulnerable people being affected by COVID-19, to interprofessional and cross-sectoral coordination and oversight, social work has an abundance of expertise to bring to the effort.

Contact tracing: an opportunity for social work to lead

Current contact tracing initiatives are time limited; while they reside largely in public health systems, the health care needed by people with COVID-19 (and their families) takes place within the larger patchwork US health system. At this time, the degree to which health and social care needs of people with COVID-19 and their families are being addressed is unclear. Given the many co-morbidities, inequities and potential post-syndromes associated with COVID-19, it is likely that those affected will have extensive health and social needs for an unknown amount of time. A recent consensus study by the National Academies of Science, Engineering and Medicine (NASEM) that underscored the central role of SDOH on health outcomes, and the critical importance of integrating social care into the health care delivery system, has important implications for the COVID-19 era. Social care is defined as the "services that address health-related social risk factors and social needs" (p. 1) and the NASEM (2019) report highlights social work as the core "social care" workforce. As contact tracing identifies those infected or at risk for infectious disease, an enhanced social care approach must be led by highly skilled social work professionals who are trained to advocate for and link vulnerable populations to the services needed to reduce inequities and promote recovery. This model of meeting urgent needs through social work and public health collaboration is consistent with the profession's roles in many other crises; it also underscores the need to integrate social care throughout the duration of the COVID-19 pandemic and beyond (Kerson & McCoyd, 2013).

The ethical expertise and cultural responsiveness of the profession is also relevant. Although contact tracing is an effective public health intervention, if implemented improperly, it has the potential to violate privacy and result in state surveillance. In addition, there is already emerging evidence that racial/ethnic minority communities are experiencing not only disproportionate disease burden, but differential treatment in social (physical) distancing enforcement (Honan & Chapman, 2020). As a workforce, social work is deeply committed to social and racial justice, and skilled in navigating ethical challenges, and professionally guided by a code whose principles safeguard privacy and confidentiality (and respect cultural differences; National Association of Social Workers (NASW), 2017). Social workers have familiarity with team-based approaches to health (Abramson, 1990;

Schuetz, Mann, & Everett, 2010) and a systems or ecological perspective that contextualizes people in their environments. In addition, social workers are trained in evidence-based interventions focused on building rapport and enhancing engagement, care coordination and management, and brief treatment (NASEM, 2019; Ross & Zerden, 2020; Zerden, Lombardi, Fraser, Jones, & Rico, 2018). For example, social workers are trained in motivational interviewing (Miller & Rollnick, 2002), a useful intervention that can be used to support individuals in creating social (physical) distancing strategies and integrate other safety precautions needed to reduce the spread of COVID-19.

Social work professional competencies correspond directly to those required to implement successful contact tracing initiatives. Masters-level social work training utilizes a competency-based approach structured around engagement, assessment, intervention, and evaluation across individual, group and community systems. Further, the profession is committed to demonstrating ethical and professional behavior, advancing human rights and social, economic, and environmental justice, using both practice-informed research and research-informed practice, engaging diversity and difference, and engaging in policy practice (Council on Social Work Education (CSWE), 2015). As shown in Table 2, five of the nine social work competencies can be easily applied to essential contact tracing skills identified by the CDC (2020) for direct patient interactions. Four additional social work competencies – engaging in policy practice (Competency #5), evaluating practice with individuals, families, organizations and communities (Competency #9), using practice-informed research and research-informed practice (Competency #4), and advancing human rights and social, economic, and environmental justice (Competency #3) – are applicable and highly relevant to advocacy and leadership needed at local, state and national levels to support contact tracing initiatives.

Social work and COVID-19 contact tracing initiatives

While published information on the role of social workers in COVID-19 contact tracing initiatives is limited, an example from Massachusetts suggests the important role that social workers can have, when they are consulted and included. In the initial Massachusetts rollout of contact tracing efforts spearheaded by PIH, a public health social worker (in a policy leadership position) inquired about whether state contact tracing protocols included any questions about caregiving needs for children and/or other dependents. Efforts had been so focused on the needs of the individual exposed to or infected with COVID-19, that questions related to caregiving had been initially omitted from the contact tracing script. Failure to inquire about children or other dependents results in an incomplete

Table 2. Contact tracing skills identified by the CDC (2020) and corresponding social work competencies.

CDC Identified Skill	Social Work Competency
An understanding of patient confidentiality, including the ability to conduct interviews without violating confidentiality (e.g., to those who might overhear their conversations)	1. Demonstrate Ethical and Professional Behavior
Understanding of the medical terms and principles of exposure, infection, infectious period, potentially infectious interactions, symptoms of disease, pre-symptomatic and asymptomatic infection	1. Demonstrate Ethical and Professional Behavior
Excellent and sensitive interpersonal, cultural sensitivity, and interviewing skills such that they can build and maintain trust with patients and contacts	6. Engage with Individuals, Families, Groups, Organizations and Individuals
Basic skills of crisis counseling, and the ability to confidently refer patients and contacts for further care if needed	7. Assess Individuals, Families, Groups, Organizations and Individuals 8. Intervene with Individuals, Families, Groups, Organizations, and Communities
Resourcefulness in locating patients and contacts who may be difficult to reach or reluctant to engage in conversation	6. Engage with Individuals, Families, Groups, Organizations and Individuals
Understanding of when to refer individuals or situations to medical, social, or supervisory resources	7. Assess Individuals, Families, Groups, Organizations and Individuals 8. Intervene with Individuals, Families, Groups, Organizations, and Communities
Cultural competency appropriate to the local community	2. Engage Diversity and Difference in Practice

picture of whether adults in caregiving roles who are exposed and may need to self-isolate, quarantine, or be hospitalized indefinitely, can safely and reasonably be expected to do so. As a public health social worker, this policy leader utilized a person-in-environment perspective (Bronfenbrenner, 1979) to identify an important omission in the standard contact tracing protocols. To rectify the error, she and her team worked collaboratively across systems to develop emergency family care plan protocols and resources to support current contact tracing. As a result, the current contact tracing script in Massachusetts now includes questions about children and other dependents, and protocols have been established to refer individuals to supportive resources (e.g., pediatricians, care coordinators, case managers, patient navigators) for emergency family care plan development when indicated. Simultaneously, the policy leader's team developed a campaign to encourage pediatricians, care coordinators, case managers, and other health carehealth care providers to proactively work with families to develop emergency family care plans, should they be needed. In this case, evaluation of existing contact tracing practices (Competency #9) and engagement in policy practice (Competency #5) ensured that ongoing contact tracing efforts adequately addressed potential barriers to safe and effective quarantine/isolation that may have otherwise been negated.

Prevention through enhanced contact tracing

Understandably, current COVID-19 contact tracing initiatives focus primarily on reducing COVID-19 transmission risk, and facilitate access to supports needed to comply with safe and effective quarantine/isolation practices. While such supports must be prioritized, most contact tracing initiatives provide resources *only* to individuals who have identified immediate unmet needs that interfere with their capacity to safely restrict contact for the duration of the quarantine/isolation period. Further, the needs addressed are *only* for the duration of the quarantine/isolation period and may not include food or support for dependents. Once the quarantine/isolation period ends, any previously unmet needs that were addressed during this period cease; any undetected needs can remain unaddressed. In addition, new stressors encountered during the quarantine/isolation period (e.g., unemployment due to missed work, loneliness due to isolation) may lead to new needs social workers can identify, treat, and serve.

Independent of an individual's capacity to safely quarantine/isolate, the social (physical) distancing measures – which are necessary to preserve public health – invariably affect SDOH. The US appears to have entered an economic downturn that is comparable in scope to the Great Depression of the 1930s (Gopinath, 2020). As of this writing, over 43 million people have filed for unemployment insurance (US Bureau of Labor Statistics, 2020). With one in four American workers applying for aid within the past 10 weeks, the unemployment rate has reached a high of 14.7% (Ivanova, 2020). Given epidemiological patterns characteristic of previous pandemics and other natural disasters, it is reasonable to anticipate that there are (or will be) substantial increases in substance use, anxiety and depression, loneliness, domestic violence, and child maltreatment (Galea, Merchant, & Lurie, 2020). While stepped care, defined as a system of delivering and monitoring mental health treatment wherein the delivering the most effective, least resource-heavy treatment to patients in need is delivered first – and then "stepped up" to more resource-intensive treatments as needed – has been identified as a viable approach in addressing the looming mental health crisis precipitated by the COVID-19 pandemic (Galea et al., 2020). However, interventions and supports are not typically provided unless a behavioral health need has already been identified. Integrating SDOH and behavioral health screening into existing contact tracing initiatives – or at minimum, coordinating screening and triage with contact tracing efforts – offers an opportunity for widespread early identification and triage of unmet social and behavioral health needs that have either been previously undetected or emerged due to the COVID-19 pandemic. In fact, it may provide a cost effective and expeditious way to employ a stepped care model and better coordination of care.

A model program to build upon

Some states have already recognized the natural fit of social work either within, or in conjunction with, contact tracing initiatives for other highly communicable diseases (e.g. TB). In NYC, social workers in the DOHMH Communicable Diseases Division play an integral part to the ongoing contact tracing work, with leadership in how best to support people with communicable diseases (e.g., TB or STIs) and their contacts. Though this role has not been previously conceptualized as within the scope of contact tracing, referrals through contact tracing activities, and communication within the team that includes field staff (e.g., CHWs and public health advisors), chest center, and other health department staff, has facilitated using contact tracing and case management to identify and address social needs that extend beyond those needed to maintain quarantine/isolation for a specified period (J. Sullivan Meissner, personal communication, May 18, 2020).

Within the Bureau of Tuberculosis Control (BTBC), recognition of the interrelated social, economic, and health challenges of people at higher-risk for TB led to enhancement of social work services. Despite reductions of TB cases in NYC in the late 1990s, including the impressive containment of a multi-drug resistant TB outbreak related to HIV/AIDS and congregate settings, the burden of TB remains high in various foreign-born communities where TB is endemic in the country of origin (Macaraig, Burzynski, & Varma, 2014). Understanding the differing barriers to accessing treatment and care among NYC immigrant communities was a factor that led to the establishment of a social work field placement (supervised by health department social workers) in the city TB clinics where many identified contacts of people who are infected with TB seek care (Torres et al., 2019; Zelnick, O'Donnell, Ahuja, Chua, & Sullivan Meissner, 2016). Between September 2018 and May 2019, multilingual social work interns assisted with issues including housing and food insecurity, mental health, substance abuse, and domestic violence, and provided on-site support services (Henderson et al., 2020). The social work internship program at DOHMH highlights how bringing social work skills into the clinic setting where people with TB and their contacts sought evaluation, treatment and care created an opportunity to address multiple social and health needs and created an avenue to stronger care engagement.

Application to COVID-19

The experience of social workers and social work interns in the NYC health department holds important lessons for COVID-19. To be effective, contact tracing efforts must include efforts to build trust with communities, respond to social needs, be trauma-informed, and have capacity to make a range of referrals. It would be advantageous to build upon the BTBC experiences and use this research to inform practice (Competency 4), to creatively integrate social workers into contact tracing teams and initiatives.

As evidenced by the aforementioned examples, contact tracing will continue to play an essential role in how we respond to COVID-19 among other infectious diseases, especially as States plan and execute reopening. Given the global, life-altering impact of COVID-19 on every sector, social work education and training will need to respond adeptly. With its emphasis on wide-lens approaches that promote population health, public health social work principles can be infused into all social work education (Ruth et al., 2017). For example, contact tracing can be integrated into generalist courses, such as human behavior and social environment, so that all MSW students are exposed to this concept early in their educational training. Other opportunities include interprofessional classes with students across the health professions to learn in vivo as the COVID-19 pandemic continues to unfold. Field education placements across coordinated sectors such as public health departments, local governmental agencies, and community hospitals can expose social work students to the interprofessional reality of effectively addressing a global and localized health crisis. Similarly, educating social work students about the role of CHWs in community-based settings, the evidence-based models that involve partnering with CHWs and how these models might also be relevant to contact tracing is

critical. Finally, as this public health – and now social and economic crisis – unfolds, lessons learned from these exemplars should be incorporated into future case studies to enrich discussion and learning around the complexities we are facing.

Conclusion

The social work profession possesses the skills and competencies need to collaborate and lead in enhanced contact tracing initiatives; its perspective and expertise can be vital to developing, scaling, and delivering urgently needed contact tracing initiatives, especially as States begin to contemplate reopening and social needs explode. However, social work expertise is not limited to contact tracing; it is applicable to other aspects of pandemic response – especially those that will be needed to weather the inevitable tsunami of mental health, social, and economic stressors that have either been precipitated or exacerbated by the COVID-19 pandemic. Many – if not all – of these sequelae are rooted in the SDOH and disproportionately affect people who are already vulnerable to racism, systematic social exclusion, and other systemic and structural forms of discrimination. Social work's history and presence as a field that fosters both individual and population health is an asset during this time.

As aptly stated by Dr. Walter-McCabe (2020) in an editorial published in this journal earlier this year, "it is time to roll up our sleeves and social work" (p.21). As social workers, if we have not yet been allocated a seat at the pandemic response decision-making table, we do not have the luxury of time to politely wait for an invitation. As a profession, this escalating public health crisis requires us to step forward to fulfill our commitment to demonstrating Competency #3: advancing human rights and social, economic, and environmental justice – building a shared perspective with our colleagues across disciplines. If the profession is excluded, an opportunity for prevention will be missed. The long-term needs of already vulnerable populations will be further exacerbated, leading to inequities greater in scope than those that are currently evident in this country. The inclusion of social work can enhance contact tracing efforts underway and strengthen its link to meeting social needs in this time of crisis. It is imperative that social work contribute meaningfully to contact tracing and other pandemic planning and response efforts to expeditiously and effectively minimize the devastating impacts of COVID-19 on all people.

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ORCID

Abigail M. Ross http://orcid.org/0000-0003-3706-4166

References

Abramson, J. S. (1990). Making teams work. *Social Work with Groups*, *12*(4), 45–63. doi:10.1300/J009v12n04_04

APM Research Lab. (2020). *The color of coronavirus: COVID-19 deaths by race and ethnicity in the US*. Retrieved from https://www.apmresearchlab.org/covid/deaths-by-race.

Armbruster, B., & Brandeau, M. L. (2007). Contact tracing to control infectious disease: When enough is enough. *Health Care Management Science*, *10*(4), 341–355. doi:10.1007/s10729-007-9027-6

Bebinger, M. (2020, April 11). What would contact tracing for coronavirus look like? *WBUR, National Public Radio*. Retrieved from https://www.npr.org/2020/04/11/832360497/what-would-contact-tracing-for-coronavirus-look-like

Bi, Q., Wu, Y., Mei, S., Ye, S., Zou, X., Zhang, Z., … Feng, T. (2020). Epidemiology and transmission of COVID-19 in 391 cases and 1286 of their close contacts in Shenzhen, China: A retrospective cohort study. *The Lancet Infectious Diseases*, *20*(8), 911–919. Online first. doi:10.1016/S1473-3099(20)30287-5.

Braveman, P. A., Kumanyika, S., Fielding, J., LaVeist, T., Borrell, L. N., Manderscheid, R., & Troutman, A. (2011). Health disparities and health equity: The issue is justice. *American Journal of Public Health*, *101(S1)*, S149–S155. doi:10.2105/AJPH.2010.300062

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
Centers for Disease Control. (2020). *Contact tracing: Part of a multipronged approach to fight the COVID-19 pandemic*. Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/downloads/php/principles-contact-tracing-booklet.pdf
Centers for Medicare & Medicaid Services. (2017). *Racial and ethnic disparities in diabetes prevalence, self-management, and health outcomes among medicare beneficiaries*. Retrieved from https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/March-2017-Data-Highlight.pdf
Clarke, A. R., Goddu, A. P., Nocon, R. S., Stock, N. W., Chyr, L. C., Akuoko, J. A., & Chin, M. H. (2013). Thirty years of disparities intervention research: What are we doing to close racial and ethnic gaps in health care? *Medical Care*, *51* (11), 1020–1026. doi:10.1097/MLR.0b013e3182a97ba3
Council on Social Work Education. (2015). *Educational policy and accreditation standards*. Retrieved from https://www.cswe.org/getattachment/Accreditation /Accreditation-Process/2015-EPAS/2015EPAS_Web_FINAL.pdf.aspx
Danquah, L. O., Hasham, N., MacFarlane, M., Conteh, F. E., Momoh, F., Tedesco, A. A., … Weiss, H. A. (2019). Use of a mobile application for Ebola contact tracing and monitoring in northern Sierra Leone: A proof-of-concept study. *BMC Infectious Diseases*, *19*(1), 810. doi:10.1186/s12879-019-4354-z
Dara, M., Sotgiu, G., Reichler, M. R., Chiang, C.-Y., Chee, C. B. E., & Migliori, G. B. (2020). New diseases and old threats: Lessons from tuberculosis for the COVID-19 response. *The International Journal of Tuberculosis and Lung Disease*, *24* (5), 544–545. doi:10.5588/ijtld.20.0151
Enanoria, W. T. A., Liu, F., Zipprich, J., Harriman, K., Ackley, S., Blumberg, S., … Porco, T. C. (2016). The effect of contact investigations and public health interventions in the control and prevention of measles transmission: A simulation study. *PloS One*, *11*(12), e0167160. doi:10.1371/journal.pone.0167160
Fenner, F., Henderson, D. A., Arita, I., Jezek, Z., & Ladnyi, I. D. (1988). *Smallpox and its eradication*. Retrieved from https://apps.who.int/iris/handle/10665/39485
Galea, S., Merchant, R., & Lurie, N. (2020). The mental health consequences of COVID-19 and physical distancing: The need for prevention and early intervention. *JAMA Internal Medicine*, *180*(6), 817. Published online April 10, 2020. doi:10.1001/jamainternmed.2020.1562
Gopinath, G. (April 14, 2020). The great lockdown: Worst economic downturn since the great depression. *International Monetary Fund Blog*. Retrieved from https://blogs.imf.org/2020/04/14/the-great-lockdown-worst-economic-downturn-since-the-great-depression/
Hanrahan, C. F., Nonyane, B. A. S., Mmolawa, L., West, N. S., Siwelana, T., Lebina, L., … Dowdy, D. W. (2019). Contact tracing versus facility-based screening for active TB case finding in rural South Africa: A pragmatic cluster-randomized trial (Kharitode TB). *PLoS Medicine*, *16*(4), e1002796. doi:10.1371/journal.pmed.1002796
Hawkins, D. (2020). The coronavirus burden is falling heavily on black Americans. Why? The Guardian. Retrieved from https://www.theguardian.com/commentisfree/2020/apr/16/black-workers-coronavirus-covid-19
Healthy People. (2020). Washington, DC: US Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved from https://www.healthypeople.gov/
Henderson, E., Buchanan, C., Caban, J., Wright-Woolcock, S., Whitehead, M., Robinson, E., … Sullivan Meer, J. (2020, May) Enhancing social support services among tuberculosis patients in New York City through a collaborative pilot project. National TB Controllers Association Annual Meeting, Minneapolis, MN.
Honan, K., & Chapman, B. (May 23, 2020). NYPD data shows racial disparities in social- distancing enforcement. *The Wall Street Journal*. Retrieved from https://www.wsj.com/articles/nypd-data-shows-racial-disparities-in-social-distancing-enforcement-11588964081
Inglesby, I. (2020). Public health measures and the reproduction number of SARS-CoV-2. *Journal of the American Medical Association*, *323*(21), 2186. Published online May 1, 2020. 10.1001/jama.2020.7878
Ivanova, I. (May 21, 2020). More than 4 million Americans file for jobless aid, bringing pandemic total above 40 million. *CBS News*. Retrieved from https://www.cbsnews.com/news/4-million-file-unemployment-jobless-claims/
Johns Hopkins University. (2020a, May 25). *Coronavirus resource center*. Retrieved from https://coronavirus.jhu.edu/map.html.
Johns Hopkins University. (2020b). *COVID-19 contact tracing*. Retrieved from https://www.coursera.org/learn/covid-19-contact-tracing?edocomorp=covid-19-contact-tracing.
Katz, M. (May 15, 2020). *New York City Council hearing: NYC's plan for COVID-19 testing and contact tracing*. Retrieved from https://www.nychealthandhospitals.org/new-york-city-council-hearing-nycs-plan-for-covid-19-testing-and-contact-tracing/
Keeling, M., Hollingsworth, T. D., & Read, J. (2020). The efficacy of contact tracing for the containment of the 2019 novel coronavirus (COVID-19). *medRxiv*. preprint. doi: 10.1101/2020.02.14.20023036.
Kerson, T. S., & McCoyd, J. (2013). In response to need: An analysis of social work roles over time. *Social Work*, *58*(4), 333–343. doi:10.1093/sw/swt035
Lackland, D. T. (2014). Racial differences in hypertension: Implications for high blood pressure management. *The American Journal of the Medical Sciences*, *348*(2), 135–138. doi:10.1097/MAJ.0000000000000308
Lishman, J. (1994). *Communication in social work*. London, UK: Macmillan International Higher Education. Red Globe Press.

Luce, K. (2020, April 8). Virus is twice as deadly for Black and Latino people than whites in NYC. *The New York Times*. Retrieved from https://www.nytimes.com/2020/04/08/nyregion/coronavirus-race-deaths.html

Macaraig, M., Burzynski, J., & Varma, J. K. (2014). Tuberculosis control in New York City—A changing landscape. *New England Journal of Medicine*, *370*(25), 2362–2365. doi:10.1056/NEJMp1402147

Marais, B. J., & Sorrell, T. C. (2020). Pathways to COVID-19 'community protection'. *International Journal of Infectious Diseases*, *96*, 496–499. Advance online publication. doi:10.1016/j.ijid.2020.05.058.

Metropolitan Transit Authority Diversity Committee. (2017). Diversity Committee Meeting Proceedings. Retrieved from http://web.mta.info/mta/news/books/archive/170221_1415_Diversity.pdf

Meyer, P. A., Yoon, P. W., & Kaufmann, R. B. (2013). Introduction: CDC health disparities and inequalities report: United States. *Morbidity & Mortality Weekly Report*, *S62*(3), 3–5.

Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change* (2nd ed.). New York, NY: The Guilford Press.

National Academies of Science Engineering and Medicine (NASEM). (2019). Integrating Social Care into the Delivery of Health Care: Moving Upstream to Improve the Nation's Health. Washington, DC: National Academies of Science Engineering and Medicine.

National Association of Social Workers (NASW). (2017). *NASW code of ethics*. Retrieved from https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-English

New York Times Editorial Board. (2020, May 10). *New York City 'can't afford to get this wrong'*. Retrieved from https://www.nytimes.com/2020/05/10/opinion/coronavirus-contact-tracing-nyc.html

Page, K. V., Beyrer, M., & Polk, C. (2020). Undocumented U.S. immigrants and Covid-19. *New England Journal of Medicine*, *382*(21), e62. doi:10.1056/NEJMp2005953

Pan, A., Liu, L., Wang, C., Guo, H., Hao, X., Wang, Q., … Wu, T. (2020). Associations of public health interventions with the epidemiology of the COVID-19 outbreak in Wuhuan China. *Journal of the American Medical Association*, *323* (19), 1915. Published online April 10, 2020. 10.1001/jama.2020.6130

Parodi, S. M., & Liu, V. X. (2020). From containment to mitigation of COVID-19 in the US. *Journal of the American Medical Association*, *323*(15), 1441–1442. doi:10.1001/jama.2020.3882

Partners in Health. (2020). *Massachusetts response: Community tracing collaborative*. Retrieved from https://www.pih.org/ma-response

Pei, S., Kandula, S., & Shaman, J. (2020). Differential effects of intervention timing on COVID-19 spread in the United States. *medRxiv Preprint*. doi:10.1101/2020.05.15.20103655

Reith Hall, E. (2019). *Communication skills in health and social care* (4th ed.). Thousand Oaks, CA: Sage Publications.

Reyes, C., Husain, N., Gutowski, C., St Clair, S., & Pratt, G. (April 7, 2020) *Chicago's coronavirus disparity: Black Chicagoans are dying at nearly six times the rate of white residents, data show*. Retrieved from https://www.chicagotribune.com/coronavirus/ct-coronavirus-chicago-coronavirus-deaths-demographics-lightfoot-20200406-77nlylhiavgjzb2wa4ckivh7mu-story.html

Ross, A., & Zerden, L. (2020). Prevention, health promotion, and social work: Aligning health and human service systems through a workforce for health. *American Journal of Public Health*, *110*(S2), S186–S190. Advance online publication. 10.2105/AJPH.2020.305690.

Russell, G., & Karlin, F. (April 6, 2020). Coronavirus disparity in Louisiana: About 70% of the victims are Black, but why? *The Times-Picayune*. Retrieved from https://www.nola.com/news/coronavirus/article_d804d410-7852-11ea-ac6d-470ebb61c694.html

Ruth, B. J., Wachman, M. K., & Marshall, J. (2019). Public health social work. In S. Gehlert & T. Browne (Eds.), *Handbook of health social work* (3rd ed., pp. 93–118). Hoboken, NJ: John Wiley & Sons.

Ruth, B. J., & Marshall, J. M. (2017). A history of social work in public health. *American Journal of Public Health*, *107*(S3), S236–S242. doi:10.2105/AJPH.2017.304005

Ruth, B. J., Wachman, M., Marshall, J. M., Backman, A., Harrington, C., Schultz, N., & Ouimet, K. (2017). Health in all social work programs: Findings from a national analysis. *American Journal of Public Health*, *107*(S3), S267–S273. doi:10.2105/AJPH.2017.304034

Schuetz, B., Mann, E., & Everett, W. (2010). Educating health professionals collaboratively for team-based primary care. *Health Affairs*, *29*(8), 1476–1480. doi:10.1377/hlthaff.2010.0052

Scutchfield, F., & Douglas. (2003). *Principles of public health practice*. Clifton Park, NY: Delmar Learning. ISBN 0-76682843-3.

Spencer, M., Gunter, K., & Palmisano, G. (2010). Community health workers and their value to social work. *Social Work*, *55*(2), 169–180. doi:10.1093/sw/55.2.169

The Lancet Editorial Board. (2020). *Reviving the US CDC*. *The Lancet*. Published online May 16, 2020. doi: 10.1016/S0140-6736(20)31140-5

The Marshall Project. (2020). A state-by-state look at coronavirus in prisons. *The Marshall Project*. Retrieved from https://www.themarshallproject.org/2020/05/01/a-state-by-state-look-at-coronavirus-in-prisons

Thompson, D. (May 6, 2020). What's being South Korea's COVID-19 exceptionalism? *The Atlantic*. Retrieved from https://www.theatlantic.com/ideas/archive/2020/05/whats-south-koreas-secret/611215/

Tomes, N. (2010). "Destroyer and Teacher": Managing the masses during the 1918–1919 influenza pandemic. *Public Health Reports*, *125*(Suppl 3), 48–62. doi:10.1177/00333549101250S308

Torres, C., Schmidt, B., Buchanan, C., Chuck, C., Wright-Woolcock, S., Henderson, E., … Sullivan Meer, J. (2019). Implementation of a social support intervention among tuberculosis patients living in communities in New York City: A pilot program. American Public Health Association, Annual Program Meeting. November 2-6, 2019 Philadelphia PA.

Turnock, B. J. (2016). *Public health: What it is and how it works* (6th ed.). Sudbury, MA: Jones and Bartlett.

US Bureau of Labor Statistics. (2020). Retrieved from https://www.bls.gov/news.release/empsit.toc.htm

Vass, A. A. (Ed.). (1996). *Social work competences: Core knowledge, values and skills*. Thousand Oaks, CA: Sage Publications.

Velasquez, J., Choi, A., Aponte, C., & Olumbhense, E. (May 14, 2020). *COVID sends public housing-zone residents to hospitals at unusually high rates*. Retrieved from https://thecity.nyc/2020/05/covid-hospital-case-rate-higher-in-areas-with-public-housing.html

Walensky, R. P., & Del Rio, C. (2020). From mitigation to containment of the COVID-19 pandemic: Putting the SARS-CoV-2 genie back in the bottle. *Journal of the American Medical Association*, *323*(19), 1889–1890. doi:10.1001/jama.2020.6572

Walter-McCabe, H. (2020). Coronavirus pandemic calls for an immediate social work response. *Social Work in Public Health*, *2*(35), 69–72. doi:10.1080/19371918.2020.1751533

Walters, J. (2020, May 16). *US states begin to reopen amid contact tracing programs scramble*. Retrieved from https://www.theguardian.com/world/2020/may/16/us-states-begin-reopening-contact-tracing-programs-scramble

Woolf, S. H., & Braveman, P. (2011). Where health disparities begin: The role of social and economic determinants—and why current policies may make matters worse. *Health Affairs*, *30*(10), 1852–1859. doi:10.1377/hlthaff.2011.0685

Yancy, C. W. (2020). COVID-19 and African Americans. *Journal of the American Medical Association*, *323*(19), 1891–1892. doi:10.1001/jama.2020.6548

Zelnick, J. R., O'Donnell, M. R., Ahuja, S. D., Chua, A., & Sullivan Meer, J. (2016). Health care provider perspectives on tuberculosis care for foreign-born populations in New York City. *International Journal of Tuberculosis and Lung Disease*, *20*(12), 1625–1632. doi:10.5588/ijtld.16.0299

Zerden, L. D., Lombardi, B. M., Fraser, M. W., Jones, A., & Rico, Y. G. (2018). Social work: Integral to interprofessional education and integrated practice. *Journal of Interprofessional Education & Practice*, *10*, 67–75. doi:10.1016/j.xjep.2017.12.011