



The impact of economic deregulation for health disparities among Gulf of Mexico commercial fishermen

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ABSTRACT

Commercial fishing is one of the most dangerous occupations in the US and includes some of the most vulnerable populations, including low-wage, older, and (im)migrant workers. We conducted a secondary data analysis of the National Oceanic and Atmospheric Administration's (NOAA) Voices Oral History Archives to better understand how structural and social determinants of health (SDoH) are related to individual injury and illness among fishermen. Interviews from Gulf of Mexico (GOM) English- and non-English speaking commercial fishermen, family members of fishermen, and policymakers were analyzed following an interpretive analytical approach. Our results show that key policy changes associated with deregulation have led to a decline in economic opportunities for fishermen in the GOM region and have long-term implications for their health and well-being. Specifically, we demonstrate how the deregulation of waterfront development, offshore oil development and pricing, and seafood imports has shaped precarious employment for fishermen, such as lower wages, job insecurity, loss of benefits, and decreased social protections. The economic precarity of fishermen is directly and indirectly related to injury, including not having the finances to maintain their boats, machines, or safety equipment as well as an inability to afford healthcare services. The linkage between poverty and structural conditions shows how neoliberalism has produced health disparities and inequities among fishing communities. We argue that governance theory can help build future research-to-policy and research-to-practice projects that are community-based, participatory, and built on long-term trust and communication.

1. Introduction

Commercial fishing in the U.S. is a multibillion-dollar industry that supports small- to large- businesses, and generates port and city revenue. In 2020 alone, the commercial fishing industry harvested over 8.3 billion pounds of seafood valued at \$4.7 billion [1]. The shrimp industry is the most lucrative among commercial fishing. In 2020, the commercial shrimp industry harvested over 279 million pounds of shrimp valued at nearly \$456 million, with Gulf of Mexico (GOM) shrimp fishing generating 72.7% of the national total [1]. In fact, Louisiana led all Gulf states with 65.6 million pounds, followed by Texas at 59 million pounds [1]. In 2017, the average annual price received by a captain for shrimp (i.e., ex-vessel price) was \$2.40 per pound [2].

Estimates of the total number of workers in the US commercial

fishing and seafood harvesting industry vary between 40,000 and 115,000, depending on how they are counted. At any given time, there are more than 11,000 shrimp fishermen¹ on the Texas and Louisiana Gulf Coast – more than any other shrimp fishery in the country. In Mississippi, 80% of Vietnamese Americans are employed in the commercial fishing industry [3,4]. Regardless of the official number, the total number of workers is undoubtedly an underestimate given the vast number of vulnerable populations in the industry, including documented and undocumented (im)migrant workers [5,6].

Fishermen are also an understudied population working in an industry with a fatality rate nearly 30 times higher than the national average [5–7]. Perils of the fishing industry are multi-faceted and include hazardous working conditions, strenuous labor, long work hours, and harsh weather [5,8,9]. Over 80% of fatal injuries for

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¹ We intentionally use the term 'fishermen' instead of 'fishers' based on feedback from the men and women we collaborated with on multiple community-based participatory research projects. Overwhelmingly, the term 'fishermen' was considered gender-neutral within the industry and we want to respect their normative meanings.

commercial fishermen are related to water vehicle transportation incidents including 53% from vessel disasters, and 36% from falls overboard [10]. In the GOM, vessel disasters and falls overboard account for 78% of fatalities [11], with the largest percentage (47%) of total deaths occurring in the shellfish industry [12]. Half of all fatalities in the GOM are caused by vessel disasters, including floods, fires, explosions and collisions/allisions [10].

The disproportionately high number of fatalities among fishermen in the GOM is a major concern, yet little is known about the actual contributing factors to injury among them. Surprisingly, there is limited published research on occupational safety and health of commercial fishermen in the GOM [4,13–16]. The few studies that are published have focused largely on technical factors to influence safety. For instance, in 2004 a quasi-simulation model training was conducted with Vietnamese fishermen on how to correctly communicate with other vessels or the US Coast Guard (e.g., horn blowing or mayday calls) [16]. Another study worked with local, trusted community leaders to recruit and implement new safety and health measures [12]. These trainings and preventative measures have been successful and well-received among GOM fishermen, but they also highlight gaps in our understanding of how social, political, and economic factors impact the health of commercial fishermen. Therefore, it is necessary to better understand the structural and social determinants of health (SDoH) that impact commercial fishermen as well as how local governance structures can address the needs of their community.

We define governance as a form of regulation that can address societal problems by engaging local actors and private-public cooperation instead of relying solely on traditional, hierarchical state activity [17, 18]. For GOM fishermen, we want to understand how enacting policies, like economic deregulation, without engaging local actors (i.e., the people most impacted by the policies) can lead to a double negation of economic and health inequity. In this way, injury prevention is analyzed through the lens of structural factors instead of behavioral choices. Following the framework of layered vulnerability, we understand political and economic factors as integral to analyzing occupational health equity and risk [19]. Specifically, the linkages between economic deregulation and employment precarity, such as contractual work, limited or no health insurance, or visas/work permits that are not pathways to citizenship [20].

US economic deregulation alongside trade liberalization began in earnest during the late-1970s, making the early 2000's the most ideal timeframe to study its long-term physical and mental health impacts. For this paper, economic deregulation refers to market-oriented reform policies that increased as a result of neoliberalism [18,20]. Neoliberalism is both an economic theory and ideology that reduced or eliminated policies like price controls and increased free trade, which impacted the commercial fishing industry (i.e., increased shrimp imports) and commercial fishermen [20]. After three decades of economic deregulation, which resulted in increased waterfront development, offshore oil drilling, higher fuel prices, and shrimp imports, fishing enterprises in the GOM struggle to be economically viable, which has long-term, indirect impacts on the health, safety, and financial integrity of commercial fishermen [21].

Research has long shown that structural, social, and economic policy decisions impact the health of workers [22]. SDoH research shows how health inequities are interconnected with individual, familial, cultural, and societal level factors and includes housing, education, food access, and job security. [23] Deregulated work hours, precarious employment arrangements, and dangerous working conditions are based in policy and have short- and long-term mental and physical health consequences [24,25]. As Michael Quinlan has demonstrated in his scholarship on contingent work and occupational health and safety (OHS), the burden of responsibility disproportionately impacts low-wage, ethnic minorities, and it is the implementation of neoliberal policies and practices, such as economic deregulation, that results in their adverse occupational health disparities [26]. As has been explored elsewhere within OHS

studies, existing health and safety research in the US has highlighted potential linkages between economic deregulation and safety in various sectors (i.e., home-based work, coal mining, environmental), yet fishing is absent from these studies [27–31]. Therefore, to examine how state activity has impacted the health of commercial fishermen, we analyzed US GOM commercial fishermen's oral histories during a nearly two-decade period of US economic deregulation. These narratives provide an ideal source for learning how SDoH can impact individual health outcomes, and we then discuss the ways governance can aid in creating regulatory policies that are derived from the actors most impacted.

2. Methods/analysis

To understand policies that impact health outcomes among Gulf Coast fishermen, we examined the National Oceanic and Atmospheric Administration's (NOAA) 2003–2019 oral history interviews from the Voices Oral History Archives (formally the Voices from the Fisheries). We followed an analytic expansion typology to ask new questions not developed in the original study [32]. Following the typology of Hinds, Vogel, and Clarke-Steffen, the analytic expansion (1) had a different research question from that in the primary study; (2) used a subset of cases chosen from the primary study to provide focused analysis; (3) reexamined a concept not addressed in the primary study; and (4) was collected as pilot data to define and expand future research questions [32]. This study was approved by the first author's Institutional Review Board.

The oral histories were originally accessed through NOAA's public website and a master oral history dataset spreadsheet was obtained from NOAA personnel. The oral history project was initially created as a public resource for researchers interested in the local, human experience of fisheries. The spreadsheet contained 1433 records of stories. Analyses followed the recommendations and standards set by the Secondary Qualitative Data Analysis in the Health and Social Sciences [32]. All records that did not contain the GOM states (i.e., TX, LA, AL, MS, and FL) were excluded, which produced 262 interviews. Interviews not transcribed by NOAA were also excluded, yielding 157 interviews. From the 157 interviews, we purposely selected 45 interviews that spanned 2005–2015 and met our inclusion criteria (i.e., mentioned policy, health, or safety) and transcripts from these were included in the analysis. The inclusion criteria were broad (i.e., fishermen or fishing industry) to include a wide range of prevention design and strategies, though the region (i.e., GOM) limited the search criteria for specificity.

Interviewees included English-speaking commercial fishermen ($n = 30$), non-English speaking commercial fishermen ($n = 5$), family members of fishermen ($n = 5$), industry policymakers ($n = 3$), and industry workers ($n = 2$) who work/ed in the GOM fishing region. Participants were 78% male and 22% female. In terms of ethnicity, 27% were non-Hispanic White, 24% Asian, and 49% other or unidentified. The other or unidentified participants did not reveal their ethnicity in the interview. Interviewees included people from various economic and social backgrounds, including vulnerable populations (67%) and (im)migrant workers (24%) [32]. Vulnerable populations included low socio-economic status (below the US poverty line), racial/ethnic minorities, someone under the age of 18 or over the age of 65, or little to no healthcare access (i.e., no insurance). The percentages reflect those who verbally identified with the vulnerable or (im)migrant criterion and excludes interviewees who did not explicitly verbalize one of the qualifying criteria.

Data analysis involved a two-stage process and started with verbatim transcripts of the recorded oral histories. The first stage was creating coding categories using an inductive approach to identify key themes and discourses that emerged from narrative data. At this stage, two researchers read separately through the transcripts and performed open coding. Data analysis assessed for economic and social factors, such as poverty or (im)migration status. This was done in Atlas.ti by creating and assigning codes (i.e., short phrases to describe data) to meaningful

text segments. Overarching coding categories were ‘policy,’ ‘economics,’ and ‘health.’ The coding categories were continually refined during the coding process.

The results from stage one was based on a constant comparison approach between the researchers so that codes were compared and revised during data analysis until a set of codes that captured all relevant data were developed and themes emerged [33]. After two researchers completed the process independently, they shared their coding files with the principal investigator (PI). Intercoder reliability was not calculated since the purpose of the analysis was to ensure that findings reflected mutually agreed upon interpretations of the data. That said, data were coded similarly with only minor differences. Findings that emerged from this phase of the analysis were similar and agreed upon by all researchers. In stage two, after open coding was completed, the PI re-read the transcripts using an interpretive analysis approach to develop a more complete and data-driven theoretical framework [34,35]. This approach allowed us to explore political, economic, and social interactions, going beyond simple typologies to understand the relationship of deregulation to individual injury and illness.

3. Results

Coded references relevant to the question of “what is the relationship between SDoH factors to injury and illness” resulted in three prominent, overarching themes about the interplay between economics, policy, and health. Of the 45 interviews our team analyzed, 41 mentioned economics as a source of struggle ($n = 311$ coded references). The need for policy intervention ($n = 130$ coded references) and the impact of pre-existing policy interventions ($n = 28$ coded references) was mentioned in 29 interviews. Health ($n = 100$ coded references) and related-health factors ($n = 113$ coded references) were discussed by 28 and 29 of the interviewees, respectively.

Specifically, three subthemes emerged from the overarching themes: increased waterfront development, oil development, and import deregulation. These subthemes impacted boat maintenance, malnutrition, and safety procedures, which are related to the SDoH and how economics and politics cannot be detangled from fishermen’s health experiences. For example, one man said, “A lot of fishermen have voiced to me that one of their main concerns was safety at sea when they’re out at sea – especially in this economy – how they don’t have the financial money to actually put more maintenance into their boats, much less, you know, consider their safety.” Another interviewee started wearing ear-plugs “because a lot of people wouldn’t fix the machines that had bearings and my hearing started ringing.” Others discussed the loss of limbs when workers are not able to properly maintain certain devices. One fisherman worked with a crew member who “cut his leg off on a winch” [36]. Another interviewee echoed these sentiments when he said, “Fishermen are dwindling because they can’t make a living anymore. Their boats are both of my boats right now need to go to the shipyard. I can’t afford to put either one of them on the shipyard...we can’t afford to work on our boats. We can’t afford the repair. We can’t afford new equipment. We can’t afford boards. We can’t afford trawls.”

It should be noted that some fishermen did not always talk highly of regulations, and some environmental regulatory policies were not popular among the fishermen, such as turtle exclusion devices (TEDs), net bans, or aquaculture regulations. One fisherman made the distinction between environmental and economic regulations when he said, “You would think that the [shrimp] imports would have regulations because everything we do is regulated, but they can dump as much [shrimp] imports as they want in the United States.” However, another fisherman described his changing perceptions of environmental regulations and his changed views on limited entry when he stated, “The federal regulations have changed pretty drastically. Back in my younger days I was pretty adamant against any type of limited-entry programs. I just felt it was my right as a citizen. But now, looking back and getting older and everything, I see all the disadvantages [to overfishing] to

somebody like myself.”

Common among all the fishermen was that a renewed focus on policy was needed for the industry. The following subthemes were directly tied to growing concerns around safety at sea and economic deregulation; specifically, how development (i.e., of waterfront property), offshore and onshore oil expansion projects (i.e., oil spills and fuel prices), and import policies (i.e., shrimp imports) have led to a decrease in profits, which produces decreased boat maintenance and increased health disparities.

3.1. Waterfront/coastal development deregulation

Through the interviews, it was discovered that fishermen and their families were concerned about the deregulation of waterfront development by large companies. Concerns included an increase in pollution and property taxes as well as a decrease in fishing business. One fisherman’s wife stated, “My husband been a commercial crabber for probably thirty years, and the crabbing business is terrible because of pollution...And it’s just sad to me that they call it progress. And I don’t know how they can call it progress when you’re destroying [the river].” Developments, such as casinos or housing, have also had the effect of pricing fishermen out of access to docks and neighborhoods, respectively. Their concerns have been validated in research, such as a 2005 Florida County Commissioner report where they acknowledged the loss of commercial “working waterfronts,” both in Florida as well as several communities throughout the US Coast, and that policies and regulations needed to be reinstated to preserve them [37]. A fisherman described the loss of land as detrimental and “it really makes me mad because there’s nobody in Washington [DC] or the legislature or the president who cares about any mom and pop who own two hundred, three hundred fifty acres, et cetera, when these people are losing their land because of the freshwater diversion.”

Casino developments were also discussed by the fishermen as being responsible for land loss as well as contributed to the development of aquaculture, which relies heavily on farmed fish over wild caught fish [38,39]. One fisherman said, “Most of the shops closed down, the [seafood] processors, and they sold out to casinos,” while another fisherman stated, “The casinos have been devastating to the commercial fishermen because they took our docks.” Other interviewees who worked in the fishing industry also explained how waterfront development has led to a decline in fishing because of the premium of waterfront property for more lucrative industries, like casinos. According to reports from the DC Fiscal Policy Institute, economic development projects have led to rising income inequality and low-wage jobs with minimal benefits [40]. Avni and Fischler argue that integrating social and environmental justice in the waterfront planning process can help to overcome inequities, but the inherent contradictions between them need to be better analyzed and addressed [41].

3.2. Oil deregulation

Oil industry deregulation and safety were also important in the interviews, including oil spills and fuel prices. The 2010 BP Deepwater Horizon oil spill, the largest oil spill in history [42], caused a lack of fish in the GOM, long-term health and environmental impacts from dispersants, and job loss [43–45]. Furthermore, the programs that were instituted to help mitigate the effects of the spill on commercial fishermen during the downturn, such as the Vessels of Opportunity program, were implemented in ways that were described as corrupt, unbeneficial for local commercial fishermen, and culturally insensitive.

The Vessels of Opportunity Program was, in theory, an opportunity for local residents to receive compensation outside of a formal claims process. However, one fisherman said, “It [Vessels of Opportunity] was the worst corruption I’ve ever witnessed, firsthand, in my life.” Another fisherman recalled having less than 24-hours of notice for the community to organize for the Vessels of Opportunity training program. A

Vietnamese advocate recalled that interpreters for the program were not qualified to interpret or translate to the Vietnamese fishing community. Furthermore, he said that the hired translators used “terminology that weren’t accepted by the Southern immigrants” and “were so ill-prepared they did it in English.” Tellingly, Ngo et. al. reported that Vietnamese commercial fishermen in the GOM experienced an increase in mental health needs with few resources about where or how to receive mental health services following the 2010 Deepwater Horizon Oil Spill [46]. Significant impacts included income, unemployment, and an inability to pay bills [46].

Another fisherman described the impact of the dispersant *Corexit* as terrifying and that his brothers’ eyes and skin burned from it. He said, “We got sprayed by the stuff. We got our waters sprayed daily, nightly for hundreds of days.” *Corexit* was later determined to be associated with respiratory, dermal, and eye irritation symptoms and was banned in the UK [47,48]. The mismanagement of the BP Oil Spill and Hurricane Katrina led many fishermen to lose their boats, homes, and ways of life. A fisherman from Louisiana said, “We need stricter management of how the oil is brought in and what safety measures are there, especially when we realize that things like that oil spill can occur. Hurricanes can cause problems. And just the environmental changes itself, the effect on it, we need to keep all that in mind.”

Fishermen also discussed the effects of fuel prices on their industry, which is a direct result of oil deregulations and international politics. Fuel was cited as a source of struggle, which dictated when and how far fishermen could work versus how much they could make selling their catch. The deregulation of energy and natural gas, which began in force during the Ford administration, has been a leading factor in increased fuel prices [49,50]. Fishermen described sitting out entire months during the fishing season because the catch would not cover their expenses, such as fuel and groceries. One man commented, “With the price of fuel, you can’t even afford to go look for shrimp.” Many fishermen also described how the drastic decrease in the price of shrimp with the drastic increase in the price of fuel was a common cause for industry decline. One said, “We’re just barely holding on. The fuel is so high right now, and it’s taking so much of our profit, you know, the fuel. You got three to four thousand dollars’ worth of expenses to go out and you make five thousand or three thousand – you’re not making too much, you see. And for profit, I mean you’re not making profit now. You’re just breaking out even...” Others commented similarly, describing the cost of fuel against a backdrop of inexpensive imported fish.

3.3. Import deregulation

Farm-raised, imported shrimp has been met with resistance from GOM commercial fishermen, which flooded the US seafood market beginning in the 1980s. During this period, technology advanced regarding farmed shrimp, notably with little economic regulation [51, 52]. Some fishermen targeted globalization and blamed deregulated shrimp imports for making the seafood industry “a kind of a dying business” that will “eventually fade out.” One fisherman said,

I’d say the early 2000s or maybe the late [19]90s, we used to get like two dollars and something a pound for forty/fifties. Now, you lucky to get eighty cents [for] imported shrimp...[and] we got a lot of import crabbing. Argentina, different places, China. we compete against a lot of people now, and they get their gas like \$2, and we pay almost \$3, \$3.50, \$3.49.

Another fisherman echoed these sentiments when he said, “The seafood industry is about gone. You know I hate to see that happen but that was just a dying thing. They just can’t—they can’t survive with the pressures they got from the foreign imports and the Federal laws and price of fuel. And I hate to see that go because that was my heritage-mine and many people down here but there’s nothing we can do about it anymore.” As one fisherman commented, “The shrimp business was probably the last one to feel the economic pressures of foreign trade.”

4. Discussion

Findings from this study indicate that the economic regulatory practices beginning in the late-1970s have had direct impacts on fishermen’s economic security, which impacts their physical and mental health. Taken together, their narratives suggest that a governance framework, which elevates the concerns about policies from those most impacted can begin to alleviate both the harmful effects of economic deregulation and create regulatory policies that are mutually beneficial to fishermen and the environment. Workers who have unregulated hours, temporary and low-paying jobs, few health benefits, and dangerous working conditions have higher short- and long-term mental and physical health consequences [18,53]. Thus, attending to the occupational health of fishermen must go beyond addressing technical processes for eliminating workplace hazards and also focus on the SDoH [54–56]. While social scientists in fields like medical anthropology have long shown how governance, such as political, economic, and social conditions impact the health of workers, occupational health research generally focuses on safety training or equipment functioning [36,38,39, 42]. The siloed divisions between occupational health and the SDoH has obscured how injury and illness is embodied and produced at micro, meso, and macro levels of influence [23,54,57–59]. A more nuanced paradigm can explain how work-related injuries (e.g., man overboard deaths) and nonwork-related factors (e.g., deregulated imports) are interconnected and influence individual decision-making processes. To improve the mental and physical health outcomes of US workers generally, and commercial fishermen specifically, we must critically understand and target governance structures [60].

The logic of unregulated industries and precarious employment grows out of capitalism but is more fully realized through the growing influence and consensus of neoliberal globalization. Neoliberalism, initiated most prominently in the 1980s through U.S. President Ronald Reagan and U.K. Prime Minister Margaret Thatcher’s policies, motivated the ideals of industry deregulation, decreased labor power, free enterprise, and advanced notions of personal responsibility. However, neoliberalism cannot be taken as a single or one-dimensional cause to the health inequity fishermen experience. Instead, the structures of power that give rise to neoliberal globalization and global industrial-complexes are ‘multiple, plural, and decentralized’ and the systems are ‘anchored in logics of control, standardization, exploitation, and profit’ [61]. Within OHS, the impacts of neoliberalism on the health of workers is often referred to as the economic pressure, disorganization, and regulatory failure (PDR) model [62, 63]. The health hazards and death that workers experience is largely unregulated under neoliberalism, which is responsible for not only lower wages, job insecurity, and a loss of benefits, but also a loss of social protections [20].

As the interviewees discussed, policies directly or indirectly created and sustained poverty through new development, oil deregulation and pricing, and fish imports, which has contributed to the declining income and subsequent increase in health and financial risk for fishermen. For example, deepwater drilling in the GOM was pursued with little environmental protections and oversight beginning in the 1970s [64]. The Mineral Management Service served in a contradictory role, both promoting offshore drilling and ensuring that the drilling was safe and provided environmental protection [65]. As the offshore energy sector was pushed deeper into the GOM, the regulatory oversight to accompany it was scant. Moreover, government oversight agencies allowed hazards to accumulate [66]. The result was one of the worst oil spills that caused socioeconomic injuries and public health hazards [67].

The economic precarity of fishermen is directly and indirectly related to injury, including not having the finances to maintain their boats, machines, or safety equipment. Moreover, in the interviews poverty was linked to their inability to afford health services. The linkage between poverty and structural conditions shows how a shift in economic deregulation alongside a shift in ideological responsibility (i.e., from governmental social support to ideas of individual responsibility) has

produced health disparities and inequities among fishing communities.

The health disparities and inequities described in the interviews can be traced to larger political economic structures, including changes to the political economy. Indeed, according to the interviews, illness and injury for GOM fishermen resulted from vessel disasters and collisions (ill-maintained boats), infection, gangrene, and hypothermia (improper gloves, socks, and jackets); and malnutrition (inability to afford healthy foods, medication, and clinical costs). Although increased safety trainings and injury prevention from equipment are important for reducing vessel disasters and should continue, the oral history records point towards a more nuanced need, suggesting a greater emphasis on the outer levels of the social ecology (i.e., economic regulation).

5. Limitations and future directions

The oral history project from which our analyses are based was not originally intended for SDoH factors, thus limiting the ability to make generalizable recommendations for GOM fishermen. More research is needed with this population to analyze specific injury and illness questions related to political economic factors and how social movements can influence injury and illness prevention. Existing studies in home-based work and coal mining show how deregulation impacts safety, but this larger context needs to be extended to fisheries in a systematic way in the future. Targeted research should focus on governance strategies, such as understanding the history of current policies, listening to and taking fishermen's considerations directly to policymakers or practitioners, and finding ways to encourage policy advocacy among fishermen. For example, research-to-policy initiatives that bring evidence to policymakers are especially promising given that they are built on long-term relationships and are often narrative-based [68–70]. Policymakers often turn to experts when addressing issues that are part of a political agenda [71]. This presents an opportunity for fishermen and researchers to collaborate and inform what policy solutions are considered and identifying solutions with the greatest evidence of effectiveness. In this context, stories are an important part of policy change, which further highlights the need for and the importance of more qualitative research, including ethnographic and oral history scholarship, with commercial fishermen. A research approach that takes structural and social aspects into account will need to be community-based and driven by the fishermen, which takes long-term trust and rapport building. Therefore, future research-to-policy and research-to-practice projects should move towards a community-based participatory research model, which includes a constant comparison between research findings and community needs or desires [72].

6. Conclusion

In one of the first studies of GOM commercial fishermen's oral histories to use a SDoH lens, we identified several policies that can be targeted for injury prevention. This finding is important given that a vast majority of research on injury prevention focuses exclusively on changing individual behavior as the primary outcome without a more comprehensive approach to worker vulnerability using policy and governance theory [9,72,73]. While identifying individual risk and protective factors of traumatic injury is critically important for prevention efforts, a multifaceted approach that focuses on the SDoH will generate knowledge that can be used to promote equity in the workplace and stimulate social policies and policy prescriptions that bridges research and practice.[17,18,60] A focus on political, economic, and social drivers alongside a more communal approach to social movements to drive down the high rates of injury and illness among commercial fishermen will take a reimagined research methodology and paradigm shift. For the future of work to be equitable, we must have a research agenda that looks at occupational health holistically, including how regulatory policies may hinder the upkeep of safety equipment and foster the vulnerabilities of precarious work.

CRedit authorship contribution statement

Shannon Guillot-Wright , Conceptualization; **Shannon Guillot-Wright**, Data curation; **Shannon Guillot-Wright and Ellie Cherryhomes** , Formal analysis; **Shannon Guillot-Wright**, Funding acquisition; **Shannon Guillot-Wright**, Methodology; **Shannon Guillot-Wright**, Project administration; **Shannon Guillot-Wright**, Resources; **Shannon Guillot-Wright**, Software; **Shannon Guillot-Wright**, Supervision; **Ellie Cherryhomes and Lacy Davis** , Validation; **Shannon Guillot-Wright**, Validation, Writing – original draft; **Ellie Cherryhomes and Lacy Davis**, Writing – review & editing, Supervision.

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