Healing a Sick World: Psychiatric Medicine and the Atomic Age

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Abstract: The onset of nuclear warfare in Hiroshima and Nagasaki had far-reaching implications for the world of medicine. The study of the A-bomb and its implications led to the launching of new fields and avenues of research, most notably in genetics and radiation studies. Far less understood and under-studied was the impact of nuclear research on psychiatric medicine. Psychological research, however, was a major focus of post-war military and civilian research into the bomb. This research and the perceived revolutionary impact of atomic energy and warfare on society, this paper argues, played an important role in the global development of post-war psychiatry. Focusing on psychiatrists in North America, Japan and the United Nations, this paper examines the reaction of the profession to the nuclear age from the early post-war period to the mid 1960s. The way psychiatric medicine related to atomic issues, I argue, shifted significantly between the immediate post-war period and the 1960s. While the early post-war psychiatrists sought to help society deal with and adjust to the new nuclear reality, later psychiatrists moved towards a more radical position that sought to resist the establishment’s efforts to normalise the bomb and nuclear energy. This shift had important consequences for research into the psychological trauma suffered by victims of nuclear warfare, which, ultimately, together with other research into the impact of war and systematic violence, led to our current understanding of Post-Traumatic Stress Disorder (PTSD).

Keywords: Atomic energy, Psychiatric medicine, Nuclear warfare, PTSD, Hiroshima, Hibakusha

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In 1946, Canadian psychiatrist George Brock Chisholm, looking back at a half century of war, told the delegates of the preparatory committee of the World Health Organization (WHO), ‘The world was sick, and the ills from which it was suffering were mainly due to the perversion of man . . . his inability to live at peace with himself.’1 Chisholm, a tough-spoken and controversial figure who once blamed the idea of Santa Claus for undermining children’s education and the cause of peace, certainly had a knack for provocative statements.2 But Chisholm, one of the founders of the World Federation for Mental Health (WFMH) and first director of the WHO, also had an extraordinary feel for the state of his field, and his statement reflected the sense of mission and urgency shared by many psychiatrists in North America at the end of the war. The world’s sickness was far from being cured. With humanity threatened by the advent of the atomic bomb, its practitioners felt that psychiatry had to get out of the clinic and asylum in order to help guide North American society – and indeed the world – to a saner place. Chisholm and his peers stood at a crucial juncture in American psychiatry. The post-war era saw a huge expansion in psychiatry and in the role of psychiatrists as social commentators, as well as significant anxiety about the implications of nuclear energy and warfare. As Chisholm’s friend and fellow Yale alumnus, William Menninger, who led the drive to reform in the United States, put it, ‘[psychiatry] can and will make an important contribution towards the solution . . . of our social problems’.3 And the most urgent problem, as Chisholm, Menninger, and others saw it, was the desperate need ‘to find ways and means of more satisfactorily sublimating man’s aggressive instinct’.4 They feared that if psychiatrists and psychologists did not succeed, the world was doomed. As psychologist Abraham Maslow declared, ‘the world will be saved by psychologists – in the very broadest sense – or else it will not be saved at all’.5

This paper examines the ways psychiatric medicine in Japan, the US and the UN reacted to the onset of the nuclear age. Nuclear anxiety and its effect on global culture and politics have been topics of much academic interest in the last couple of decades. Work by Paul Boyer, Spencer Weart and, more recently, Joseph Masco and others have done much to further our understanding of atomic anxiety.6 Psychological warfare was an important part of this literature, most notably the work of Guy Oakes on ‘emotional management’, practised by the US government in its drive to control nuclear terror on

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1 John Farley, Brock Chisholm, the World Health Organization, and the Cold War (Vancouver: University of British Columbia Press, 2008), 17.
2 For the Santa Claus reference, see ibid., 182.
3 Michael E. Staub, Madness Is Civilization: When the Diagnosis was Social, 1948–1980 (Chicago: University of Chicago Press, 2011), 18.
4 Ibid.
5 Ian Dowbiggin, The Quest for Mental Health: A Tale of Science, Medicine, Scandal, Sorrow, and Mass Society (New York: Cambridge University Press, 2011) 139. Psychology is included here as the divisions between the two were not always clear at the time. In fact, as discussed below, the Menninger group was actively working to blur the lines between them. See Rebecca J. Plant, ‘William Menninger’s Campaign to Reform American Psychoanalysis, 1946–8’, History of Psychiatry, 16, 2 (2005), 182.
6 Paul Boyer, By the Bomb’s Early Light: American Thought and Culture at the Dawn of the Atomic Age, 1st edn (New York: Pantheon, 1985); and Spencer R. Weart, Nuclear Fear: A History of Images (Cambridge, MA: Harvard University Press, 1988); Rosemary Mariner and Kurt Piehler. The Atomic Bomb and American Society: New Perspectives (Knoxville, TN: University of Tennessee Press, 2009); Joseph Masco, ‘Atomic health, or how the Bomb altered American notions of death’, in J. Metzl and A. Kirkland (eds), Against Health: How Health Became the New Morality (New York: New York University Press, 2010), 133–56; Robert A. Jacobs, The Dragon’s Tail: Americans Face the Atomic Age (Amherst, MA: University of Massachusetts Press, 2010).
More specifically tied to the history of medicine, Jackie Orr and Andrea Tone have examined important aspects of the history of psychiatry during the nuclear age. The history of trauma has also seen significant advances in recent years. The work of Allan Young, Didier Fassin, Richard Rechtman, Ruth Leys, and more recently Svenja Goltermann and others, has done much to further our understanding of the history of the phenomenon. Building on this work, this paper aims at exploring North American psychiatry’s increasingly global role, and the way it impacted on developments in Japan and the UN. Using psychiatrists’ and psychologists’ reactions to nuclear energy as a lens, the paper focuses on a number of important figures: Brock Chisholm and Alexander Leighton at the UN and in the US, and Kubo Yoshitoshi and Robert J. Lifton in Hiroshima, as well as on the larger groups and networks around them. The way psychiatric medicine related to atomic issues, I argue, shifted significantly between the 1940s and 1960s as the profession moved from accommodating and adjusting to nuclear reality to resisting it. Furthermore, debates on nuclear issues were important drivers of change and affected the history of psychiatry, and, specifically, the history of trauma. Rather than medical advances, it was changes in the politics of the profession towards a more radical and critical engagement with the defence and nuclear establishments that served as a catalyst for propelling research on survivors and acknowledgment of long-term trauma.

The shift in attitudes had a concrete impact on the treatment of A-bomb victims in Japan. Although Japanese doctors, for the most part, did not take active part in American debates, they were influenced by developments in the US and elsewhere, which, in turn, played a part in the eventual recognition of A-bomb trauma in Hiroshima and Nagasaki. As I have examined at length elsewhere, American psychiatrist Robert Lifton’s experiences in Hiroshima played a critical role in the identification of Post-Traumatic Stress Disorder (PTSD). Lifton was not the first psychiatrist who worked with A-bomb survivors

7 Guy Oakes, ‘The Cold War system of emotion management: mobilizing the home front for World War III’, in Robert Jackall (ed.), *The Age of Propaganda* (New York: New York University Press, 1995), 275–96.
8 Andrea Tone, *The Age of Anxiety: A History of America’s Turbulent Affair with Tranquilizers* (New York: Basic Books, 2009); and Jackie Orr, *Panic Diaries: A Genealogy of Panic Disorder* (Durham, NC: Duke University Press, 2006); Gerald N. Grob, *The Mad Among Us: A History of America’s Mentally Ill* (New York: Free Press, 1994); Dowbiggin, *op. cit.* (note 5); and Staub, *op. cit.* (note 3).
9 Ruth Leys, *Trauma: A Genealogy* (Chicago: University of Chicago Press, 2000); Allan Young, *The Harmony of Illusions: Inventing Post-Traumatic Stress Disorder* (Princeton, NJ: Princeton University Press, 2001); Didier Fassin and Richard Rechtman, *The Empire of Trauma: An Inquiry into the Condition of Victimhood* (Princeton, NJ: Princeton University Press, 2009); Svenja Goltermann, *The War in their Minds: German Soldiers and their Violent Pasts in West Germany*, trans. Philip Schmitz (Ann Arbor, MI: University of Michigan Press, 2017).
10 For Japanese surnames I adhere to the Japanese convention in putting family names first, to be followed by given name.
11 Dagmar Herzog made a similar case in relation to debates over compensation for Holocaust survivors. I have related such debates to nuclear issues in my recent article. For Herzog, see ‘The obscenity of objectivity: post-Holocaust anti-Semitism and the invention-discovery of Post-Traumatic Stress Disorder’, in Lauren Faulkner and Wendy Lower (eds), *Lessons and Legacies XII: The Holocaust Today* (Evanston, IL: Northwestern University Press, 2013), p. 31 and Ran Zwigenberg, ‘Wounds of the Heart’: Psychiatric Trauma and Denial in Hiroshima, *History Workshop Journal*, Vol. 84 (Fall 2017) dbx037, https://doi.org/10.1093/hwj/dbx037.
12 Ran Zwigenberg, *Hiroshima: The Origins of Global Memory Culture* (Cambridge: Cambridge University Press, 2014), 144–74. PTSD, which entered the medical lexicon in 1980 through the third *Diagnostic and Statistical Manual of Mental Disorders* of the American Psychiatric Association (APA DSM III), is defined as, ‘a condition of persistent mental and emotional stress occurring as a result of injury or severe psychological shock, typically involving disturbance of sleep and constant vivid recall of the experience, with dulled responses to others and to the outside world’. https://en.oxforddictionaries.com/definition/us/post-traumatic_stress_disorder. The National Institute of Mental Health has a very helpful non-clinical explanation of symptoms at https://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd/index.shtml (accessed 13 June 13, 2017).
(hibakusha in Japanese), either in Japan or in the US. Hibakusha were surveyed and researched extensively by both Japanese and American (mostly military) researchers prior to his arrival to Hiroshima in 1962. However, Lifton was the first who tackled the long term psychological impacts of the A-bomb, aiming to help individuals rather than study them. Significantly, Lifton treated hibakusha not as a subject population but as individuals. Prior researchers who tackled nuclear issues in Japan and the US were sympathetic to hibakusha, and were as adamant, at least in principle, in their resistance to nuclear arms as Lifton was. But they were also part of the defence and nuclear establishment, or working with it closely, and were more than accommodating to government positions on nuclear energy and the larger Cold War agenda. The early post-war psychiatrists who tackled nuclear issues sought ways to help society deal with and adjust to the new nuclear reality rather than resist it. Generally, they worked within state institutions rather than against them. Psychologists and psychiatrist also tended to focus on individuals’ inability to adapt to society, and the threat this posed to the social order (and world peace), rather than on the impact of violence on the human psyche. This was especially a problem in Japan, and had an adverse effect on research and care for survivors. Starting in the late fifties, however, leading psychiatrists in reform-minded organisations like the Group for the Advancement of Psychiatry (GAP) and Physicians for Social Responsibility (PSR) moved psychiatry away from accepting what Robert J. Lifton had called the ‘nuclear normal’, and towards a more radical position that sought to change and resist this new nuclear reality, a shift that resulted in putting the focus on survivors’ long term psychological issues and adult trauma.

US Psychiatry Enters the Nuclear Age

At the end of the Second World War, psychiatry and its allied professions received an extraordinary amount of attention in North America. As historian Roy Porter has written, the decade after the war in the United States witnessed ‘the psychiatrization of everything’.

Underpinning the popularity of the profession was a deep-seated notion that something was wrong with modern society. Not only individuals but also modern culture as a whole were in need of psychiatric advice. ‘There is a growing realization among thoughtful persons,’ wrote social scientist Lawrence K. Frank in 1948, ‘that our culture is sick, mentally disordered, and in need of treatment’.

Much of this anxiety could be traced on the one hand to a growing sense of a ‘mental health crisis’, a sense shared by both mental health professionals and society at large and, on the other, to the civilizational doubts and fears produced by the mushroom clouds over Japan. American psychiatrists, however, were more than willing to take on the challenge. This was part of a larger shift towards social medicine in the profession as a whole. For many leading physicians at the WHO and elsewhere, any improvement in public health would require social and economic measures in addition to strictly medical ones. Affirming psychiatry’s importance as part

13 Staub, op. cit. (note 3), 37.
14 Ibid.
15 The sense of crisis was due to the exposure of large numbers of ‘mental defects’ by the military during screening for conscription as well as the large numbers of returning soldiers who suffered from anxiety. See, for instance, John Hersey, ‘a short talk with Erlanger’, Life Magazine, 29 October 1945, 108–22. Furthermore, as numerous contemporary observers noted, the atomic bomb was a leading source of cultural anxiety in the decade after the war. See note 6, especially Boyer, By the Bomb’s Early Light and Weart, Nuclear Fear.
16 Farley, op. cit. (note 1), 3, 213–9.
of the drive towards social medicine, Chisholm told the WHO, ‘The microbe was no longer the main enemy; science was sufficiently advanced to be able to cope admirably with it, if it were not [for] such barriers as superstition, ignorance, religious intolerance, misery and poverty. It was in man himself, therefore, that the cause of present evils should be sought; and these psychological evils must be understood in order that remedy might be prescribed.’

Chisholm was one of the main advocates for a more proactive profession, and was well situated within both the WHO and North American psychiatry to advance his agenda. In November 1945, Chisholm became the second recipient of the Lasker Award, given by the Academy of Medicine in New York City. The first Lasker prize was awarded in 1944 to William Menninger. These were given on the recommendation of various American societies, including the National Committee against Mental Illness. Both Menninger and Chisholm had been senior officers during the Second World War, Menninger in charge of the US Army’s Neuropsychiatry Division and Chisholm in a similar role in the Canadian army. Both men also graduated from Yale University’s Institute of Human Relations. Chisholm’s prize indicated the high regard in which he was held in psychiatric circles in the US. His friendship with Menninger tied him to a rising cohort of US psychiatrists who were redefining mental health and reforming the American Psychiatric Association (APA). William Menninger, together with his brother Karl, founded the Group for the Advancement of Psychiatry (GAP), which became the main vehicle for reform during the post-war period. His views were fairly similar to Chisholm’s, if expressed in more restrained language. In books like *Psychiatry in a Troubled World* (1948), Menninger drew on his experience of the war to offer the ‘solution of social problems in a peacetime world’, chief among these, ‘preserving the peace’.

After two World Wars, and with the atomic bomb threatening the very survival of humanity, ‘preserving the peace’ was seen as an urgent task. ‘We have now reached a point,’ wrote Chisholm, ‘where drastic readjustment for human personality and conduct appears necessary for survival.’ He went on to say, ‘The reasons we found ourselves involved in war’ are ‘all well-known and recognized neurotic symptoms . . . all psychiatrists know where these symptoms come from. The burden of inferiority, guilt, and fear we have all carried lies at the root of this failure to mature successfully’. Maturing, for Chisholm, meant adequately dealing with the threatening new reality of the atomic age. The main argument was that it was not the atom (which frequently also stood for modern technology as a whole) that was dangerous, but the humans behind the atomic trigger. The WMFH director Frank Fremont-Smith, a close colleague of Chisholm and Lawrence K. Frank, wrote, ‘The real issue is not the peaceful use of atomic power but the peaceful use of human power . . . [and] for the management of human power we need experts in human relations.’ This, of course, would entail increased budgets and investment in psychiatry and psychology. Pressing the urgency of the task, Fremont-Smith complained, ‘In the splendid program of the National Science Foundation, unfortunately, only a small

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17 Ibid., 17.
18 William C. Menninger, *Psychiatry in a Troubled World; Yesterday’s War and Today’s Challenge* (New York: MacMillan, 1948).
19 George Brock Chisholm, *The Reestablishment of Peacetime Society: Responsibility of Psychiatry, Responsibility of Psychiatrists; Panel Discussion of the First Lecture* (Baltimore: William Alanson White Psychiatric Foundation, 1946) 1, 5–6.
20 Frank Fremont-Smith, ‘The Mental Health Aspects of the Peaceful Use of Atomic Energy’, *The American Journal of Orthopsychiatry*, 28, 3 (1958), 456.
fraction of its funds have been devoted... to social sciences.’ Quoting Margaret Mead (a co-founder of WFMH), he called for a new drive towards the establishment and expansion of what she called ‘human sciences’.  

These scholars felt a visceral threat to human survival and shared a progressive belief in the necessity of ‘a social leap that would save us from extinction’. This was done in the context of the early expansion of peace movements and anxiety over atomic war. Research began as early as 1946, when the Social Science Research Council established a committee to study the social effects of the bomb. This was the first of many research projects that looked into the bomb’s social effects, prompting some to call for ‘a second Manhattan project’ – this time for the social sciences – to deal with the bomb’s supposedly revolutionary impact on society, again echoing larger global trends about the supposed gap between technology and humanity’s mental capabilities. This move also reflected a blurring of boundaries between psychiatry and other social sciences, and a conflation of social and mental problems that was common in Cold War social science. This development was, in turn, closely connected to the expansion of psychiatry. When Menninger met with Truman, the president, impressed by Menninger’s arguments, declared, ‘Never have we had a more pressing need for experts in human engineering. The greatest prerequisite for peace, which is uppermost in the minds and hearts of all of us, must be sanity – sanity in its broadest sense, which permits clear thinking on the part of all citizens’ (emphasis added). In order to tackle these problems, psychiatrists argued for an increase in the number of psychiatrists and for elevating the role of psychiatry in government and society. Chisholm agreed: ‘We need in the USA,’ he wrote, ‘some twenty thousand psychiatrists, we have only three thousand.’

The president’s call for recruiting ‘experts in human engineering’ reflects both the important place the psychology and psychiatry played in the immediate post-war period and the authoritarian tendencies of some in the profession. As Michal Shapira noted, in the British context, ‘psychoanalysis in this period played a crucial part in conceptualising social reconstruction. It helped define both the optimism and the pessimism of social democracy and of the era in general.’ Like Chisholm, psychologists and social workers urged the British government to devote more resources to fighting the scourge of asocial behaviour, which they termed, ‘the enemy within’. What psychoanalysis could do was help such people to ‘adjust’ to social demands. Such tendencies were present on both sides of the Atlantic. As Daniel Pick noted, developments in American psychology, “built upon the idea that psychoanalysis should strengthen the patient’s ego and help it to adapt to external reality. This might easily imply that health and conformity were one and the same thing.” Parents, especially mothers, were mostly to blame for failure to

21 Ibid., 467.
22 Jacobs, op. cit. (note 6), 42.
23 Boyer, op. cit. (note 6), 76–81.
24 Ibid., 45, 368.
25 Jamie Cohen-Cole, ‘Cold War Salons, Social Science, and the Cure for Modern Society’, Isis: An International Review Devoted to the History of Science and Its Cultural Influences, 100, 2 (2009), 228.
26 Plant, op. cit. (note 5), 184.
27 Chisholm, op. cit. (note 19), 13.
28 Michal Shapira, The War Inside: Psychoanalysis, Total War, and the Making of the Democratic Self in Postwar Britain (London: Cambridge University Press, 2015), 197.
29 Ibid.
30 Daniel Pick, The Pursuit of the Nazi Mind: Hitler, Hess, and the Analysts (London: Oxford University Press, 2014), 22.
adapt. Chisholm, for instance, combined his Freudianism and environmentalism to hold parents responsible for ‘making a thousand neurotics for every one that psychiatrists can hope to help with’. Such attitudes had direct impact on trauma research. Veterans who suffered from ‘battle fatigue’ (the word trauma was rarely used) received extensive short-term care in military hospitals. But those who were not cured were suspect. The blame lay not just with the veterans themselves, but also with the mothers and wives who had failed to nurse them or raise them properly, a theory which came to be known as ‘momism’.

In the US, the psychiatry came to play an increasingly important role in US Cold War research. Cornell University professor Alexander Leighton’s career is a case in point. As the head of the United States Strategic Bombing Survey (USSBS) team in Hiroshima, Leighton, a psychiatrist and cultural anthropologist, had much influence on subsequent research. Leighton started his engagement with Japan and the war while working with a very different group: Navajo Indians. After war broke out, Leighton’s work on the Navajo (who also suffered greatly from nuclear tests and uranium mining) led him to research in the Japanese internment camps. The first camp (in Poston, Arizona) was located on Navajo Indian land, and as Leighton was at hand, he ‘was asked to carry out a study on the humane administration of people under stress in a Japanese Relocation Centre’. After doing psychological and anthropological surveys of the internees, Leighton became Chief of the Foreign Morale Analysis Division of the Office of War Information. This in turn led him to Hiroshima after the bombing, where he performed research on the hibakusha. Leighton had no knowledge of Japanese or of Japan (or of the Navajo for that matter), yet his work, like that of his more famous colleague Ruth Benedict, with whom he worked closely, was highly influential on subsequent research into the psychological impact of the A-bomb.

While Leighton’s career is fascinating, its scope lies largely outside the focus of this article. For our purposes, it will suffice to say that Leighton, though a humanist and a firm believer in peace and co-existence, worked throughout his career with subject populations in a colonial-like framework, and constantly sought to employ social science to supplement physical science while using similar methodologies and objectives. Leighton was one of the first Americans to enter Hiroshima. His job was to ‘study the feelings and responses of survivors’ towards the A-bomb. Leighton did not seem to appreciate the irony of the US government dropping an A-bomb on Hiroshima’s residents, and then sending him to ask them about their feelings on the matter. Still, though committed to his work in Hiroshima, he was far from enthusiastic. After his first tour of the city, he recalled, ‘I became aware

31 Chisholm, op. cit. (note 19), 17.
32 See Zwigenberg, op. cit. (note 12), p. 2.
33 Rebecca J. Plant, ‘The Veteran, his Wife, and their Mothers: prescriptions for psychological rehabilitation after World War II’, in Diederik Oostdijk and Markha Valenta (eds), Tales of the Great American Victory: World War II in Politics and Poetics (Amsterdam: VU University Press, 2006), 95–105.
34 http://www.westerncounties.ca/isaiah/aleighton.html (accessed 6 January 2017).
35 Pauline Kent, ‘Ruth Benedict’s Original Wartime Study of the Japanese’, International Journal of Japanese Sociology, 3, 1 (1994), 81–97.
36 Leighton’s path intersected with that of Margaret Mead and many others social science luminaries. Peter Mandler brilliantly and sympathetically analyses Leighton and others’ work during the war in his Return from the Natives: How Margaret Mead Won the Second World War and Lost the Cold War (New Haven, CT: Yale University Press, 2013), 134–64.
37 Marc-Adélard Tremblay, ‘Alexander Hamilton Leighton: Biographical Memoirs’, Proceedings of the American Philosophical Society, 153, 4 (2009), 479.
of the emptiness that had been with me since I had entered Hiroshima, an emptiness that seemed to reflect the city.’

Leighton was first angry, then numb. ‘Amid this jumble of thought and feeling there came, like a huge round fish swimming out of green vagueness into sharp focus, the image of the white-face clock in the gloom below with its hands at 8.15.’ Leighton was resolved to use his experience in Hiroshima, and those of the survivors he worked with, to help prevent the horror of a new nuclear war. Like Chisholm and others, he saw his work as a way of countering such a threat by using social science in the service of peace.

Leighton believed that ‘social sciences has potentialities for development and use in human welfare that are comparable with what has been realized in other fields where the scientific method has been employed for several hundred years’. He saw his work in Hiroshima and Nagasaki as part of this quest. Leighton and his team set up shop in one of the surviving buildings and set about surveying the population’s response to the A-bomb. He recalled:

Using a technique of random selection, some members of the team gathered in a small sample of the population from the ruins of the city . . . other members of the team sat all day [for] long interviews with these men and women – shopkeepers, factory workers, labourers, housewives, cooks, teachers, farmers, fishermen and many more. Some of them were frightened and wordless and others were over talkative, but for the most part they were quiet and willing.

Leighton and his team set about systematically collecting and recording the psychological reactions to the bomb. For the purposes of overcoming the inherent difficulties of working in Hiroshima, Leighton put his trust in objectivity and the scientific method, a belief he stuck to throughout his career. His belief in the scientific method was based on the assumption that ‘there exist psychological uniformities common to all tribes, nations, and “races” of human beings’ (quotation marks in the original). Leighton trusted that the social scientist could and should see through these, no matter the circumstances. Leighton’s good intentions notwithstanding, such methods and context led him and others who worked with him to always look at the experience of hibakusha first and foremost as ‘data.’

Furthermore, rather than using his work for the cause of peace, Leighton’s most important contribution in the eyes of US defence planners was the discovery of the A-bomb’s role as a ‘weapon of terror’. As the USSBS report noted:

Aside from physical injury and damage, the most significant effect of the atomic bombs was the sheer terror which it struck into the peoples of the bombed cities. This terror, resulting in immediate hysterical activity and flight from the cities, had one especially pronounced effect: persons who had become accustomed to mass air raids had grown to pay little heed to single planes or small groups of planes, but after the atomic bombings the appearance of a single plane caused more terror and disruption of normal life than the appearance of many hundreds of planes had ever been able to cause before. The effect of this terrible fear of the potential danger from even a single enemy plane on the lives of the peoples of the world in the event of any future war can easily be conjectured.

38 Alexander Leighton, ‘The Sown Wind (On Hiroshima)’, unpublished manuscript, Folder 11, Box 1, Lawrence C. Vincent Collection, University of Colorado Archives at Boulder Libraries, Colorado.
39 Ibid.
40 Alexander H. Leighton, Human Relations in a Changing World; Observations on the use of the Social Sciences (New York: Dutton, 1949), 11.
41 Leighton, op. cit. (note 38), 7.
42 Leighton, op. cit. (note 40), 76.
43 United States Strategic Bombing Survey, ‘The Atomic Bombings of Hiroshima and Nagasaki’, http://www.atomicarchive.com/Docs/MED/med_chp24.shtml (accessed 4 January 2017).
Before the H-bomb was exploded in 1952 (and in some cases, even after it), atomic weapons were seen by the US military chiefly as a weapon of terror. As with massive aerial bombings during the war, US strategists in the early 1950s saw the primary value of the A-bomb as residing in its ‘psychological implication’ and ability to ‘shatter enemy civilians’ morale’. US defence planners continued to use the wartime ‘morale-shattering’ arguments in their strategic planning for an attack on the USSR. At the same time, civil defence planners were using the USSBS research to claim that nuclear bombs were not so different from regular ones, and thus the destruction and psychological terror they produced was manageable. This was another arena for the expansion of psychiatry, and a catalyst for much research on the impact of aerial bombing on the human psyche. Leighton, intermittently took part in such work and continued to work with the military. Besides his work on atomic energy, surveyed below, he was asked in the early 1970s to join an endeavour assessing the military use of herbicides on the civilian population of South Vietnam.

Research on Hiroshima and Nagasaki, and especially on survivors’ reactions, was almost exclusively carried out as part of such defence-related projects, and was almost always based on US military research. This meant concentrating on the short-term psychological impact of the bomb, and, furthermore, treated hibakusha not as individuals in need of healing but as objects of research. Moreover, as I examined elsewhere, the US repeatedly denied the malignant long-term impact of the bomb and, until the end of its occupation of Japan in 1952, repeatedly censored medical research.

Such attitudes made research on hibakusha’s long-term psychological harm difficult and had adverse impact on their care.

Kubo Yoshitoshi and the Japanese Response

While psychiatrists who dealt with the atom were writing lengthy articles about atomic war and its dangers, the actual victims of atomic warfare – the hibakusha of Hiroshima and Nagasaki – received very little attention. Following the first wave of USSBS research, there was relatively very little research aimed at evaluating the long-term impact on the mental state of survivors. What Japanese research initiatives there were, unfortunately remained mostly unconnected and inconclusive. This peculiar lack can be attributed to a number of interconnecting factors. Japanese psychiatry’s record in dealing with trauma in general – and the A-bomb in particular – was minimal, and psychiatrists were not sympathetic to the idea of long-term trauma. During the war, military psychiatry was generally neglected as doctors had to confirm to the ideas of a superior Japanese fighting spirit, which did not

44 Jackie Orr, op. cit. (note 8), 87.
45 Tremblay, op. cit. (note 37), 481.
46 See Zwigenberg op. cit. (note 12).
47 Japanese research on trauma has remained largely unstudied by historians in either Japanese or English. Histories of the profession like Okada Yasuo, Nihon seishinka iryōshi [Japanese Psychological Science: A Medical History] (Tokyo: Igaku Shoin, 2002) or Yagi Gōhei and Akira Tanabe, Nihon seishinbyō chiryoishi [History of Treatment of Mental Illness in Japan] (Tokyo: Kaneharu Shuppan, 2002) focus almost exclusively on the history of psychiatric hospitals and, surprisingly, do not mention the impact of the war (one exception being doctors’ efforts in campaigning for mental patients who suffered horribly from neglect during the war). New work has sought to change this situation, especially in regards to military psychiatry. Beside Nakamura Eri’s and Janice Matsumura’s work, quoted below, Shimizu Hiroshi, Nihon Teikoku Rikugun to seishin shōgai heishi [The Japanese Imperial Army and Soldiers’ Mental Disorders] (Tokyo: Fuji Shuppan, 2007).
48 Zwigenberg, op. cit. (note 12), p. 147.
allow for an acknowledgment of psychological injuries. For instance, in 1937, military psychiatrist Kamata Shirabe told doctors who were heading to the China front, ‘Unlike the Western militaries during the First World War, there has been no neurotic illness called war neurosis in the Japanese military since the present war [the Asia-Pacific War] broke out. I’m proud as a member of the military of the Emperor that the fact shows people of the Japanese Empire have especially high morale.’

Civilian doctors after the war had no such inhibitions but, trained in the German tradition, they generally preferred physical and somatic evidence to mental and were generally hostile to trauma. Only one long-term study was conducted on military veterans and none was done on civilian victims of the fire bombing raids. The first survey on A-bomb survivors, was done in 1949 by Okumura Nikichi and Hitsuda Heizaburō, who examined the persistent psychological problems of hibakusha. They found several cases of ‘emotional turmoil, nervous disease and depression’. They attributed these cases, however, not directly to psychological stimuli but to ‘worsening physical health because of radiation from the bomb’. Few researchers followed this survey and almost all of them preferred somatic to psychological explanations. Konuma Masuo, in 1953, concluded there was ‘high probability [psychological problems occurred] because of changes in the brain and nervous system which were caused by radiation damage’. In another case in 1958, Matsuda Shizuo found a connection between survivors’ low white cell count and mental and cognitive problems. Other researchers reached similar conclusions. A plausible causative link between symptoms and psychological trauma was difficult to prove scientifically. Moreover, it was difficult for researchers to isolate the psychological effects of the bomb from the effects of radiation.

In any case, American censorship made publishing on A-bomb trauma difficult, as American occupation authorities in Japan actively suppressed research on and discussion of the possible impact of nuclear warfare. Japanese ‘self-censorship’, and dependence on government funding added to the silence on the matter. As Osaka Eiko demonstrated the occupation also heralded a shift in Japanese psychology towards American methodologies and increased connection with the US. The occupation authorities used a number of

49 Nakamura Eri, ‘Nihon teikoku rikugun to sensōshinkeibyō: senshōbyōsha o meguru shakai kukan ni okeru “kokoro no kaze” [The Imperial Army and War Neurosis: War Casualties and PTSD in Society]’, Sensō sekinin kenkyu, 81 (2013), 52–61.
50 Here and elsewhere, I follow Japanese convention in putting family name first, followed by given name.
51 Eri Nakamura, ‘“Invisible” War Trauma in Japan: Medicine, Society and Military Psychiatric Casualties’, Historia Scientiarium, 25, 2 (2016), 144.
52 See Katō Masaaki, Noirōza shinkeishō to wa nani ka [What are Neurosis and Nervous Disorders] (Tokyo, 1955). See also Suzuki Akihito’s summary of the book (in Japanese) at http://akihitosuzuki.blog.fc2.com/blog-entry-59.html accessed 25 July 2016.
53 Nishimoto Minaao and Matsumoto Kazuo, ‘Saigai no shinshi hoken gakuteki kenkyū: hanshin daijishinsai 6 nen ato ni okeru [Research on Preserving the Health of Mind and Body after Disasters: A Report 6 Years after the Great Hanshin Earthquake]’, Jinbun ronkyū, 52, 3 (2002), 66.
54 Ibid.
55 Matsuda Shizuo, ‘Genbaku hibakusha no seishin shōgai ni tsuite [About the Mental Damage of A-bomb survivors]’, Hiroshima igaku, 11, 9 (1958), 38.
56 For a full survey, see Zwigenberg op. cit. (note 12), 151–4.
57 Zwigenberg op. cit. (note 12), 153.
58 Osaka Eiko, ‘Sennō Nihon shinrigaku [Psychology in Occupied Japan]’, Surugadai Daigaku kyūyō kenkyūho, 1 (2011), 181.
59 Ibid., 177.
psychologists in conducting surveys of Japanese attitudes towards occupational reforms. Kubo Yoshitoshi, a Hiroshima native and former Imperial Navy doctor, was one of these psychologists.\footnote{Chūgoku Shinbun, 16 December 1954.} Kubo was one of the lone psychologists who worked on the A-bomb’s psychological impact, and was exceptional in connecting with sociologists and other social scientists to promote hibakusha welfare. He did so through the Heiwa to gakumon o mamoru daigakujin no kai [University Scholars Society for the Preservation of Peace and Scholarship], which he founded in 1954 together with sociologist Nakano Seiichi and philosopher-activist Moritaki Ichirō.\footnote{Ibid., 186.} Kubo was also a founding member of ‘Japanese Psychologists for Peace’ (JPP). This organisation, inspired by American social scientists, sought to further the ‘link between psychoanalysis and peace’\footnote{Ibid., 186.}. Kubo signed a 1950 ‘Peace appeal to American Psychologists’, which had been crafted at the fourteenth annual Conference of the Japanese Psychological Association. The peace appeal, like the JPP message as a whole, made a point of emphasising the Japanese psychologists’ unique situation as citizens of ‘the country [which] experienced the terrors of the atomic bombs in Hiroshima and Nagasaki’.\footnote{Chūgoku Shinbun, 1 August 1956.}

Kubo’s political activity, military background and focus on social goals put him in the same milieu as Chisholm, Leighton and others psychiatrists and psychologists of the early post-war generation. He was a committed activist for peace and survivors’ welfare but his research largely fell short of addressing their psychological problems. Indeed, Kubo’s main contribution was his involvement with relief organisations and he was one of the main backers and initiators of the ‘white paper’ surveys, which sought to assess the state of hibakusha and to demand provision of adequate financial and medical relief from the Japanese government.\footnote{Tomizawa Saiichi, ‘Kanai Toshihiro no shisō to kodō [The thought and actions of Kanai Tashiro]’, in Hiroshima Daigaku Bunshokan, Hibakuchi Hiroshima no fukkō katai ni okeru shinbunjin to hōdō ni kan suru chōsa kenkyū: Zaidan hōjin mitsubishi jinzai kagaku kenkyū josei heisei 19 nendo kenkyū seikai hōkokusho [An Investigation in Regard to Journalists and Information in the Recovery of Atomic-Bombed Hiroshima: A Research Report for the Mitsubishi Foundation Grant for Social Sciences], (Hiroshima, 2009), 31–2. See also Chūgoku Shinbun, 1 August 1956.} The white papers did not, however, urge the government to provide mental health care, and curiously contained little but oblique references to ‘anxiety’ and ‘problems of the heart’ when referring to the mental states of hibakusha.\footnote{Gensuibaku Kinshi Hiroshima ken Kyōgikai, Genbaku higaisha jittai chōsa hōkoku [An Informational Report on the True Conditions of A-bomb Survivors] (Hiroshima: Gensuibaku Kinshi Hiroshima Kyōgikai Genbaku Higaisha Kyūen linkai, 1956), 5–6.} This lack can largely be attributed to the peculiar nature of Kubo’s own research, which neglected long-term suffering and issues of care, and to the inconclusive state of research into hibakusha mental issues by psychiatrists and psychologists at the time. Kubo’s main aim was to promote peaceful reconciliation and understanding between Japan and the US. He thought hibakusha voices were important in this regard, but he also showed surprising animosity towards hibakusha’s distrust of atomic power.\footnote{For hibakusha responses, see Zwigenberg op. cit. (note 12).} His ‘research’, he told a reporter, ‘[is] aimed at finding out where the unease towards the use of atomic energy among survivors comes from and clarifying how we can find a solution to this [problem].’\footnote{Chūgoku Shinbun, 4 August 1958.}
Kubo and many of his colleagues at the University Scholars Society were enthusiastic supporters of both atomic energy and reconciliation with the US. Society president, Moritaki Ichirō, who was also the head of the main survivor organisation Hidankyō, declared on the occasion of the initiation of compensation campaigns, ‘Atomic power... must absolutely be converted to serve the happiness and prosperity of humankind. This is the only desire we hold as long as we live.’

This positive outlook on atomic energy came from a desire to see peaceful atomic energy as a triumph of science and as a force for ‘life’, as opposed to the military use of the atom as a force for ‘death’. This meant construing ‘atomic power as progress’, as historian Imahori Seiji (another Society member) did in a later work entitled The Age of the H-Bomb; moving from a dark atomic past into a bright atomic future. Anxiety and negative attitudes were seen as impediments to progress, which, in the case of Kubo, were coupled with suspicion of a lack of objectivity in hibakusha testimony. Kubo was by no means trying to silence hibakusha or prevent them from receiving treatment. His priorities simply lay elsewhere.

Kubo’s research could only be published in 1952, after the end of the occupation. It surveyed the impact of the A-bomb on a group of fifty-four hibakusha. Like his American colleagues, Kubo was concentrating on the issues of panic and individual and mass nervous breakdown. Kubo divided reactions to four ascending stages, form ‘instinctive action’ to ‘panic’, ‘quasi panic’ and a ‘blank’ (stupefied) stage. None of these stages, however, lasted beyond the immediate aftermath of the bomb. Kubo concluded that ‘perhaps some time thereafter, every respondent succeeded in slowly adjusting to their circumstances’. Thus, he completely ignored the possibility of long-term adult trauma. This move can be ascribed to Kubo’s military background and the larger context of A-bomb research, examined above, which generally was unfavourable to long-term trauma. Non-psychologists, like sociologist Nakano Seiichi, who together with Kubo was an important figure in initiating campaigns for compensation, did conduct long-term surveys that examined the psychological damage inflicted by the A-bomb’s effects on hibakusha. But Kubo was more interested in the survivors’ political role rather than in their health.

Kubo’s aims, in line with American defence research, were ‘to map the experience of A-Bomb Panic, and clarify the process of formation of [later] attitudes [towards the bomb and atomic energy] among survivors’. Like Leighton, he was framing this, however, as an effort to contribute to world peace. In a 1950 interview with a Hiroshima newspaper, Kubo presented his research in conjunction with the collection of A-bomb testimonies as a way ‘to bring the voice of hibakusha’ and the ‘experience of those who were bombed (hibakutaiken)’ into current research on the bomb, which was currently dominated by American viewpoints. Here Kubo argued that common hibakusha voices were important, yet his reasoning was somewhat tortuous. ‘Until now only the opinions of a couple of well-

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68 Quoted in Zwigenberg op. cit. (note 12).
69 Imahori Seiji, Gensuibaku jidai: gendaishi no shōgen [The Age of the H-bomb: A Witness to Contemporary History] (Kyoto: San’ichishobō, 1960), 15.
70 Kubo Yoshitoshi, ‘Hiroshima hibaku choku go no ningen kōdō no kenkyū [Research in the Human Reactions in Hiroshima Right After the A-bomb]’, Shinrigaku kenkyū, 22, 2 (1951), 103–10.
71 Ibid., 109.
72 Hamatani Masaharu, ‘Genbaku hibakusha mondai chōsa kenkyū no rekishi to hohō [History and Methods of Research into A-bomb survivors]’, Hitosubashi Kenkyū, 21 (1971), 56.
73 Kubo, op. cit. (note 70), 103.
74 Chūgoku Shinbun, 2 June 1950.
known people have been heard in regards to the experience of the bomb and nuclear energy, but the opinions of the general public (and especially hibakusha) are not well known. But, Kubo did not think common voices were sufficient by themselves. He sought to investigate these opinions scientifically, so as to counter ‘individual stories and rhetorical flourishes or reportage’. Such insistence on ‘scientific patterns’, and disdain for ‘flourishes’ in hibakusha testimony demonstrated much that Kubo had in common with the Chisholm and others.

Echoing and building on his earlier article, Kubo’s 1954 study, ‘Attitudes Towards the Atom and Hydrogen Bombs (Gensuibaku e no taido)’, surveyed the opinions and attitudes of hibakusha towards the bomb and atomic energy, but dwelled little on its long-term impact. ‘My working hypothesis is,’ he wrote, ‘is . . . [that] the extremely strong [feelings of] fear, dread, and unease are the basis in all people (subete no hito) of homogenous and stable beliefs and attitudes, as well as of ideas about the Atom and Hydrogen bombs, and . . . [also] form the context for their beliefs, attitudes, and ideas regarding the US.’ Kubo’s main aim was to find a way to overcome such irrational fears, in search of reconciliation and a more rational attitude towards the atom (and specifically atomic energy). Kubo was aware of the extremely limited nature of his research. In a later interview, Kubo implied his methods were a necessity born of the limitations of American censorship and a lack of funding. Such criticism notwithstanding, it is important to acknowledge Kubo’s importance for the compensation movement. Kubo was important in pushing for the publication of white papers and other reports that were instrumental in bringing about the medical relief laws for the hibakusha. Still, Kubo failed to push for any kind of compensation for mental injuries, and his impact on the field of psychology in Japan or elsewhere was quite limited. Hibakusha suffering was definitely acknowledged by Kubo and his peers: he tied hibakusha anxiety and other disorders to the psychological impact of the bomb (it lay in the ‘stimuli produced by the bomb’). Nevertheless, he was not interested in proposing a cure, but in how to prevent the next war, an effort in which atomic energy played a significant role. Kubo thus saw survivors’ suffering as a given, and did not seek to remedy it. His insistence on the ‘scientific method’ and ‘finding objective patterns’, and his disdain for individual stories and ‘exaggerations’, point to a particular view of social science that aimed at solving social problems, but that also neglected individual suffering.

**Atoms for Peace at the UN**

Kubo’s efforts to promote atomic energy were parallel to a campaign to portray atomic energy in a positive light at the UN, in which psychiatrists played a leading role. Here as well, psychiatrists avoided examining the impact of atomic energy on hibakusha. From 1953 onward, following President Eisenhower’s ‘Atoms for Peace’ UN address, the US was engaged in a worldwide campaign to present the atom as a force for good. This effort intensified after the March 1954 Lucky Dragon Incident, when a Japanese fishing boat was blasted with radiation from the US H-bomb tests in the Pacific. Following that

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75 Ibid.
76 Kubo Yoshitoshi, ‘Gensuibaku e no taido [Attitudes towards the H-bomb]’, *Genbaku to Hiroshima*, 16 (1954), 24.
77 *Chūgoku Shinbun*, 15 May 1953 (evening edition).
78 Hamatani Masaharu, ‘Genbaku taiken to “kokoro no kizu” [A-bomb Experience and PTSD]’, *IPSHU kenkyū hōkoku*, 41 (2009), 5–6.
incident and the radiation scares that came in its wake, the anti-nuclear movement received a tremendous boost, and the US redoubled its campaign to counter this development.\textsuperscript{79} At the UN, the WHO and other international bodies, many mental health professionals and social scientists enthusiastically co-operated with ‘Atoms for Peace’ campaigns. UN support for atomic power was a reflection of an international consensus among social scientists, including those of socialist countries. Soviet representatives fully supported this particular agenda.\textsuperscript{80} The Soviets had Atoms for Peace programmes for their own satellite countries, and, as Paul Josephson has demonstrated, were as enamoured by the promise of the atom as was the West.\textsuperscript{81} Chisholm and his team were at the centre of this work at the WHO and UNESCO.\textsuperscript{82} Chisholm worked alongside leading social scientists, including luminaries like Margaret Mead and Claude Lévi-Strauss. American universities such as Columbia and Princeton also played a leading role in these efforts. Three of the four main psychiatrists working in WHO and UNESCO committees were North Americans who also had strong connections with the WFMH and GAP. Chisholm and Mead at the WHO, and the former WFMH president Otto Klineberg from Columbia University at UNESCO – who worked with Leighton during the war – chaired their respective committees.\textsuperscript{83} Alexander Leighton, was the third prominent psychiatrist. The fourth was an Austrian psychiatrist from the University of Vienna, Hans Hoff, who shared many of his North American peers’ ideas.\textsuperscript{84} There were no Japanese or other non-Western scholars present. The main thrust of these efforts was to argue that critics of the atom were emotional and suffered from what Hans Hoff called ‘irrational pathological fear’.\textsuperscript{85} According to a UNESCO report,

\begin{quote}
It may be that the most important characteristic of [nuclear energy] is to be found not in the actual physical or economic implications of nuclear energy but in the psychological and social attitudes which it produces . . . This particular topic was given careful consideration by the WHO expert committee which stressed the irrational fantasies which nuclear energy was capable of producing, and which might be related to those of early childhood.\textsuperscript{86}
\end{quote}

The WHO and UNESCO investigation into the mental health effects of nuclear energy reflected earlier debates in the WFMH.\textsuperscript{87} These saw the atom as part of a larger

\textsuperscript{79} For a full review of Atoms for Peace and its place in American diplomacy and propaganda, see ch. 5 of Kenneth Osgood, \textit{Total Cold War: Eisenhower’s Secret Propaganda Battle at Home and Abroad} (Lawrence, KS: University of Kansas, 2006).

\textsuperscript{80} See ‘Expert Meeting on the Social and Moral Implications of the Peaceful Uses of Atomic Energy’ (UNESCO House 15–19 September 1958), UNESCO/SS/26 620.992/3A06 (44) UNESCO Archives, Paris; and A. Zvorkine, ‘Social and moral problems of the scientific and technical revolution of our time’, in Otto Klineberg (ed.), \textit{Social Implications of the Peaceful Uses of Nuclear Energy} (UNESCO, 1964).

\textsuperscript{81} Paul Josephson, \textit{Red Atom: Russia’s Nuclear Power Program from Stalin To Today} (Pittsburgh: University of Pittsburgh Press, 2005). See also Dolores L. Augustine, \textit{Red Prometheus: Engineering and Dictatorship in East Germany, 1945–1990} (Cambridge, MA: MIT Press, 2007).

\textsuperscript{82} Report by the director general on the expert meeting on the social and moral implications of the peaceful uses of atomic energy (September 1958), UNESCO/SS/26 620.992/3A06 (44), UNESCO Archives, Paris.

\textsuperscript{83} Mandler, \textit{op. cit.} (note 36), p. 135.

\textsuperscript{84} \textit{ibid.}, 1.

\textsuperscript{85} Hans Hoff, ‘Mental health implications in the peaceful uses of nuclear energy’, in Otto Klineberg (ed.), \textit{Social Implications of the Peaceful Uses of Nuclear Energy} (Paris: UNESCO, 1964), 100.

\textsuperscript{86} Tomizawa, \textit{op. cit.} (note 64), 5.

\textsuperscript{87} World Health Organization, ‘Mental Health Aspects of the Peaceful uses of Atomic Energy: A Report of a Study Group’ (Geneva, 21–26 October 1957), in WHO/MH/AE 1–2 (1957–8), WHO archives, Geneva, 3. I thank Harry Wu for this reference.
development, including automation, to which humans had no choice but to adjust. As the UNESCO report stated,

There are dangers in the peaceful uses of nuclear energy, but they should not be exaggerated, nor should it be forgotten that many other useful developments, in transportation, industrial production, medicine etc., have also their drawbacks... [these fears] are rational... a psychiatrist sees other, deeper fears and anxieties, not easily allayed by providing scientific information, because they are unconscious fantasies, and give rise to irrational reactions.\(^88\)

Thus, psychiatry’s role, as with other developments in modern capitalism, was to help those who could not adapt to the modern world.

The WHO report showed a surprising (and rather condescending) concern with the mental stability and preparedness of world leaders in dealing with nuclear issues. The report complained that there were ‘even some in highly responsible positions, whose behaviour is not entirely free from... unhealthy responses’.\(^89\) The main issue, the authors concluded, was that ‘the authorities like the general public do not always show the ability to make clear distinction between warlike and peaceful uses of atomic energy’.\(^90\) This the authors attributed to lack of information and proper understanding of the science involved: ‘Few if any [leaders], have [a] background which includes a thorough scientific training.’\(^91\) Leaders, the article argued, find themselves overwhelmed by the pace of technological change. This situation may cause them to ‘react at times with more or less irrational ideas and inconsistent acts’. This, the authors continued, ‘sometimes take the form of hostility to atomic energy as the cause of their dilemma and the rapidity of changes which have overwhelmed them’.\(^92\) The authors tried to remedy this situation through their research. They expressed their determination to treat these issues scientifically, and their hope that ‘people in positions of authority will accept its conclusion that the behavioural sciences can make a valuable and concrete contribution to the adaptation of mankind to the advent of atomic power, making it indeed as painless and as un-harmful as possible and allowing man to reap a rich harvest from the seed his inventive genius has sown’.\(^93\)

The WHO report on atomic energy defined its objective as examining atomic energy’s ‘effects on mental health [which] can come, either directly from influence of radiation on the nervous system or strong psychological reactions [i.e. non-somatic]... that will have to be considered more or less pathological’, or which are caused by ‘man’s encounter... [with the] shattering possibilities of atomic power’.\(^94\) The mental experiences of the survivors of Hiroshima and Nagasaki (which were, of course, shattering in ways other than the metaphysical) were hardly mentioned in these deliberations, however. After examining in some detail the actual physical damage done by radiation, citing American and Japanese research on hibakusha brain damage, and ascertaining the very real nature of the health risks, the WHO committee, without quite understanding the irony in its statement, turned to examine the ‘thoughts and fantasies about the danger of the nuclear bomb’.\(^95\) Following widespread assumptions in American and other professional literature, the WHO also launched ‘an enquiry into what was thought might turn out to be

\(^{88}\) Otto Klineberg, Introduction to Social Implications of the Peaceful Uses of Nuclear Energy, 10–11.

\(^{89}\) Otto Klineberg, Introduction to Social Implications of the Peaceful Uses of Nuclear Energy, 6.

\(^{90}\) Ibid., 24.

\(^{91}\) Ibid., 34.

\(^{92}\) Ibid., 33.

\(^{93}\) Ibid., 6.

\(^{94}\) World Health Organization, op. cit. (note 87), 4.

\(^{95}\) Ibid., 16.
a hidden reservoir of anxiety in the population’. But this research, which included surveys of psychiatrists in eight countries on both sides of the iron curtain, ‘gave surprisingly blank results’, with no mention of nuclear energy in the ‘expressed content of psychiatric patients, whether psychotic or psychoneurotic’. The lack of empirical evidence, however, did not discourage the WHO, which went on to recommend the incorporation and expansion of the mental health profession to help leaders and populations generally, as well as those of the fledgling International Atomic Energy Agency (IAEA). Echoing Chisholm and others, the authors called for more mental health experts within the IAEA and other nuclear energy-related bodies and activities. They recommended creating a network of psychiatrists who would advise governments ‘in order to plan a rational local mental health program’ that would help countries deal with the rapid expansion of atomic power, especially in the event of ‘accidents and unexpected hazards’.

Both UNESCO and WMFH/WHO actions came after an October 1957 nuclear accident at the Windscale plant in Cumberland, England. Rather than alarming scientists about the dangers of nuclear energy, the accident spurred the UN to further combat what they saw as the prejudices and panic exhibited by local populations. WMFH director Frank Fremont-Smith pointed out that the accident ‘produced something approaching panic among the local population’. This ‘panic’ had wide impacts on local resistance to nuclear plants. The WHO report decried the fact that ‘although [they] have been presented with evidence that atomic energy has no health risk to population around the plant’, local communities ‘irrationally oppose Atomic plants’. According to the report, the resistance of the population was ‘an expression of fear which is displaced and irrational’. Anxieties about atomic energy were connected to ‘thoughts and fantasies about the danger of the nuclear bomb’. These ‘fantasies’ included ‘irrational fears’ following nuclear tests which ‘conflict with many official pronouncements put out about risks and safety measures’ taken by authorities. To tackle the irrational fears and anxieties supposedly plaguing the public, the study group recommended an expanded mental health programme and greater rationalisation and expansion of mental health care in the community.

The WHO, UNESCO, and other bodies made a very strong connection between mental health, as advocated by early post-war American psychiatrists, and the accepted integration of atomic energy in global society. The study group recommended that governments work towards ‘(1) an upbringing free from anxiety and hate (2) creation of good human relations in the family . . . (3) education of those in responsible positions in public life . . . in mental health requirements, [and] (4) relief of the healthy from the burden of the mentally ill’. This move, in turn, was tied to the implied unpreparedness of non-Western societies to deal with the fruits of science. UNESCO, in a separate report, emphasised its efforts in educating populations and incorporating science into local cultures. ‘[O]therwise, forced acceleration of the uses of atomic energy might have dangerous repercussions upon local cultures which have lagged behind in the past.’

96 Ibid., 17.  
97 World Health Organization, op. cit. (note 87), 39–40.  
98 Ibid., 44.  
99 Fremont-Smith, op. cit. (note 20), 456.  
100 World Health Organization, op. cit. (note 87), 21.  
101 Ibid., 16.  
102 Ibid., 41.  
103 UNESCO Press Division, ‘UNESCO and Atomic Energy’, IAEA Bulletin, 2, 1 (1960), 21.
of scientific education and rationalisation of society, and current anxieties over new technologies and the impact of modernity, came together in a campaign to push atomic energy (and science as a whole) as the cure to the very conditions brought about by rapid technological change. Indeed, UNESCO aptly (and without any trace of irony) called this effort the ‘“domestication” of atomic energy’. Thus, the cure for anxieties over that most emblematic of modern science’s advances, the atom, was a greater acceptance of psychiatric science. The emphasis in the UN report – as in post-war psychiatry as a whole – was science’s capacity to solve problems, rather than on the destruction it caused. As David Serlin put it in a different context, psychiatrists sought to normalise the terms under which ‘modern science could absorb its capacity for recklessness and turn trauma into opportunity’. Such an approach allowed them to repackage the bomb and nuclear energy not as political problems but as psychological ones, further deflecting the hard questions brought about by modernity’s worst war.

Robert J. Lifton and the Rise of Anti-Nuclear Psychiatry

In 1962, Robert J. Lifton, a young Jewish-American psychiatrist in Japan to study youth psychology, visited Hiroshima. Lifton, like Leighton, was shocked by what he learned there. ‘I was moved, horrified and shocked beyond any words I can express. But I was also greatly stimulated by the need to know more about what has really happened to the victims of the bomb – in a psychological and human sense.’ In one of his first forays into the field, Lifton met Kubo Yoshitoshi. Lifton hoped to learn from Kubo about his research into the psychological trauma of hibakusha, a topic he was contemplating for research. The meeting, however, was far from a success. In a letter to a friend, Lifton remarked, ‘I found our talk curiously unsatisfying, and it was hard to tell exactly what he was after in his studies.’ Lifton’s perplexity, and the two men’s inability to understand one another, were about more than just differences of culture and age. Although both men were committed liberals, Lifton had a completely different understanding of the merits and uses of social activism and psychiatry. Lifton did not fight in the war and was too young to take part in the first wave of social activism among social scientists. He was a part of a generation of psychiatrists whose ideas about anti-nuclear struggle differed from those of Kubo, Chisholm and their peers.

While the Lucky Dragon incident intensified efforts by nuclear supporters to neutralise opposition to nuclear weapons and convince the public of the merits of the atom for others, the advent of thermonuclear weapons exposed the absurdity of such efforts. The institutions established by post-war American psychiatrists were an important arena for such debate. Starting in the mid-fifties, the GAP engaged in a number of debates on nuclear weapons and civil defence, culminating in two seminars in Asbury Park, New Jersey in 1958 and 1959, on ‘the psychological and social aspects of the use of nuclear energy’. These seminars revealed that an overwhelming majority within GAP supported a clear anti-nuclear stance, and resulted in a major report by GAP’s Committee on Social Issues.

104 Ibid.
105 David Serlin, Replaceable You: Engineering the Body in Postwar America (Chicago: University of Chicago Press, 2004), 182.
106 Robert Lifton to David Riesman, 10 April 1962, Box 15, Folder 8 (1962) Robert Jay Lifton papers, Manuscripts and Archives Division, The New York Public Library, Astor, Lenox, and Tilden Foundations. (NYPL-MSA).
107 Ibid.
that was decisively anti-nuclear in its tone and conclusions. These developments can be attributed in large part to the work of Jerome D. Frank, who in 1957 sent an open letter to GAP members challenging current thinking on nuclear issues, a summary of which he also published in the *Atlantic Monthly*. Frank’s letter ignited quite a controversy. Sixty-seven GAP members submitted to the society their opinions of Frank’s letter. Many of these were along the lines of the research presented above, warning of the dangers of ‘denial, apathy, projection and other uses by individuals of techniques of adaptation to threats and perhaps to the reality of atomic warfare’. Frank’s argument, however, was radically different. Rather than trying to help people adjust to the ‘reality of atomic warfare’, he was aiming to avoid this reality altogether.

Frank and his supporters were using very similar language to Chisholm and others. The basic assumptions of the role of psychiatry were, at least initially, also very similar. ‘The nuclear arms race,’ Frank wrote, ‘poses a mortal and increasingly pressing danger to civilization. It is obvious that the chief source of peril lies not in the nuclear weapons but in the human beings behind them, and that therefore the danger can only be resolved by changes in human attitudes’. Like his predecessors, Frank saw a special place for psychiatrists, as experts on human relations, in dealing with the dangers of paranoia and stereotypical thinking that led to the nuclear arms race. He also saw parallels between the behaviour of nuclear-armed nations and psychiatric patients. Unlike his predecessors, however, for Frank, nuclear reality was distorted. Words like ‘defence’ or ‘balance of power’ had lost their meaning. There was no defence or possibility of a ‘defensive shield’ from the H-bomb. ‘We seem to have slipped,’ concluded Frank, ‘into George Orwell’s world of doublethink without knowing it.’

Frank’s argument was taken up by Franklin McLean, keynote speaker at the first GAP nuclear seminar. He, like Frank, pointed to the futility of nuclear defence in a thermonuclear world. Reviewing the objections of psychiatrists, McLean opposed seeing the arms race as ‘a natural phenomenon’. He preferred to see it, rather, as man-made, and to concentrate my attention on the build-up that has led us into the situation in which we find ourselves today. I would prefer to examine the possibility of [the] reversibility of some of the trends that have produced the threats with which we have to deal rather than regards the arms race as something which cannot be helped.

The break with earlier debates, however, was not yet complete. As McLean added, ‘This is a problem of human behaviour with which psychiatrists are most familiar and best equipped to deal.’ Significantly, McLean summarised his position using almost the

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108 Group for the Advancement of Psychiatry, *The Psychological and Medical Aspects of the Use of Nuclear Energy: The Meetings of the Group for the Advancement of Psychiatry, Held at the Berkeley-Carteret Hotel, Asbury Park, New Jersey on Sunday November 9 1958 and on Sunday April 5 1959* (New York: GAP, 1960), 205. Frank served in the Philippines as a military psychiatrist. During his service in Asia, he became staunchly anti-nuclear and, according to Lifton, was the first major psychiatrist to be active in the anti-bomb movement. Author’s communication with Robert J. Lifton, 8 January 2014.

109 Dana Farnsworth, who presided over the GAP nuclear energy seminars, politely referred to the reactions as covering ‘a wide spectrum [of] the opinions of the GAP members’. See Group for the Advancement of Psychiatry, *ibid.*, 209.

110 Ibid.

111 Jerome D. Frank, ‘The Great Antagonism’, *Atlantic Monthly* (November 1958), 21.

112 Ibid., 24.

113 Group for the Advancement of Psychiatry, *op. cit.* (note 108), 209.

114 Ibid.

115 Ibid., 218.
same exact words Chisholm used a decade earlier: ‘The world is sick, and the nuclear arms race is only one symptom—a symptom that is true may lead to the death of a patient.’

Beyond the GAP, other medical groups were also coming to a similar conclusion. Perhaps the most important was PSR, which in 1962 commissioned a report, The Fallen Sky, on the possible results of a nuclear attack on Massachusetts. The PSR was founded by a group of anti-nuclear physicians in 1961, with, according to its official history, ‘one major goal: to educate the medical profession and the world about the dangers of nuclear weapons’. It was markedly more radical than earlier associations and had a clear left of centre political stance, which became even more pronounced through the 1960s. Although there were no psychiatrists in the initial founding group, Lester Grinspoon (a rather prominent psychiatrist) and others became strongly involved in the movement very early on. Both Chisholm and Karl Menninger were among a list of prominent sponsors of PSR, appearing on its official letterhead. Roy Menninger, William Menninger’s son, was also a prominent member and a frequent contributor to PSR newsletters. Frank also became a member, and the presence of such important figures of post-war psychiatry in PSR, as well as Frank’s use of language very similar to that of Chisholm and others, point to the difficulty in demarcating clear transitions between one era and the next in psychiatric activism or lines of political allegiances. Especially with figures like Chisholm, traditional definitions of left or right just do not apply. The sixties campaigners, indeed, showed both continuities and clear departures from what came before them.

PSR’s early campaigns show a decisive departure from previous periods by questioning the very possibility of humanity to deal with nuclear catastrophe in a way that resembled any past experience. Fallen Sky was representative of early PSR literature. Presenting a devastating critique of the defence establishment (including essay titles like ‘The Illusion of Civil Defence’), but doing so in measured and detached language, PSR authors revealed the sheer devastation and nightmarish quality of the aftermath of a nuclear attack. The section written by psychiatrists Herbert Leiderman and Jack Mendelson relied not only on USSBS material, but for the first time brought in reports by the

116 Ibid., 215.
117 Saul Aronow (ed.), The Fallen Sky; Medical Consequences of Thermonuclear War (New York: Hill and Wang, 1963).
118 Physicians for Social Responsibility, A History of Accomplishments (Boston, MA: PSR, 2000), 1. Drs Bernard Lown, Victor Sidel, Sidney Alexander, Jack Geiger, Alexander Leaf, George Saxton, and Robert Goldwyn were among the founding physicians.
119 Initially, the PSR took a measured approach that grounded its mission in the profession, neither resisting nuclear energy for peaceful purposes nor expressing open hostility to the government. The organisation’s statement of purpose read:

We believe that the physician’s response to this challenge must stem from his dual role as scientist and as a clinician. As scientist he is the custodian of technical information, trained in the analysis of complex problems, and experienced in the objective presentation of data. It is the physician’s responsibility as scientist to study the medical consequences of nuclear testing, of attack by chemical or biological weapons, and of thermonuclear war. Other relevant factors include such issues as the psychological factors in the arms race, alternative approaches to the resolution of conflict, and the peaceful uses of atomic energy. It is the physician’s further responsibility as scientist to further share his knowledge with the public, in order to make possible rational discussion and informed decision-making by the community.

Physicians for Social Responsibility, ‘Statement of Purpose’ (circa 1963), Box 14, Folder 6, The Robert J. Lifton Papers, NYPL-MSA.
120 Author’s communication with Robert J. Lifton, 8 January 2014.
121 The PSR statement of purpose also used very similar language to Chisholm’s and Menninger’s earlier campaigns.
Japanese victims themselves. Furthermore, the authors used such first-hand accounts to demonstrate the absurdity of earlier social scientists’ attempts to offer solutions. This was plainly exposed by reference to Margaret Mead’s suggestion, at an American Association for the Advancement of Science (AAAS) symposium in Denver in 1961, ‘that an international program be developed where certain recently married couples be provided their honeymoon underground in a blast proof shelter’, so that ‘at any given time, a reasonable number of the breeding population would be protected from annihilation in event of an attack’. Mendelson and Leiderman were quite reserved in their critique, writing, ‘The serious introduction of such a possibility by an eminent anthropologist points up to the magnitude of some of the issues of even planning a defence shelter program.’ They unequivocally concluded, however, that psychiatric and social issues resulting from even planning for a nuclear exchange ‘are of a magnitude and complexity that make it advisable to concentrate on eliminating the need for such a program’.

A similar conclusion was also reached in a GAP report by a group of leading psychiatrists, whose members included PSR members Frank and Lifton (the latter had joined after reading ‘Psychiatric Aspects of the Prevention of Nuclear War’ in Fallen Sky). The report was staunchly anti-nuclear, and very much along the lines of Frank’s and others’ objections to normalising nuclear reality while emphasising psychiatrists’ political role. One of the major themes of the report was dehumanisation and the other mechanisms that might lead to warfare. In a continuation of earlier themes, the authors argued that dehumanisation is one of ‘the psychological effects of industrialization, specialization, collectivization, urbanization and automation’. They went a step further, arguing that these forces were increasingly making industrial killing easier, as killing ‘becomes as mechanized and impersonal as pulling a lever to start a production chain belt’.

In this context, the authors used a significant number of references to the Holocaust. Regarding nuclear war, the authors of the report wrote, ‘A foretaste of what the short life of survivors of such an attack could be like is suggested by Bettelheim’s graphic description of what happened to the inmates of the Nazi concentration camps when they were reduced to desperation by conditions of extreme starvation and misery.’ If the victims of nuclear warfare were seen as comparable to concentration camps inmates, the perpetrators of nuclear war were akin to Eichmann (whose trial had just ended in Jerusalem). Beyond the Holocaust, references were made to the civil rights movement and other issues. When talking about the treatment of people as ‘subhuman’, for instance, the authors added, ‘Examples [of victims] are Jews, Negros, Orientals, and so forth.’ Thus, a critique of nuclear warfare expanded to a larger critique of the structures of racism and discrimination, contemporary and historical, in both the US and abroad.

The universalisation and conflation of the categories of nuclear and Holocaust victimhood by the report’s authors, as well as their emphasis on dehumanisation and

122 Aronow, op. cit. (note 117), 45–6. The report quotes at length Hiroshima’s Hachiya Michihiko, a physician, and Nagai Takashi, a Nagasaki physicist.
123 Ibid., 45.
124 Ibid., 54.
125 Group for the Advancement of Psychiatry, Committee on Social Issues, *Psychiatric Aspects of the Prevention of Nuclear War* (New York: GAP, 1964), 245.
126 Ibid., 235.
127 Ibid., 278.
128 Ibid., 247.
129 Ibid., 246.
the ‘emotional distancing’ that allowed killing, were evidence of the important impact of the work of Robert J. Lifton in Hiroshima. Lifton, who like Frank became politically active following his service in Asia, was part of a new generation in psychiatry that started to forcibly question and challenge old assumptions about social sciences’ role in society. His critique of his colleagues’ politics was interwoven with a critique of orthodox psychiatry and the older generations’ very concept of reason. In a 1962 article, Lifton criticised conservatives’ labelling of leftist students and anti-nuclear activists as ‘irrational’. Directly challenging the entire enterprise of labelling resistance to nuclear power and weapons as irrational anxieties, Lifton argued that the very real fear of personal annihilation in a nuclear world is neither ‘unreasonable nor irrational’. The conservatives’ position was, Lifton argued, an ‘expression of a general tendency, in political and military thinking throughout the world, to distort the fundamental concept of reason’. 130

The influence of Erik Erikson, a close friend and mentor, made Lifton wary of Freud’s insistence on the importance and finality of childhood for personality formation, which consequently made it easier for him to accept that trauma experienced later in life could alter adult personality. Lifton’s views were shared by a number of young researchers who criticised the over-determinism of Freudianism, along with their older colleagues’ entanglement with the defence establishment and attendant reluctance to engage in politics. 131 Indeed, Lifton’s research on hibakusha was as motivated by his politics as it was by his science: ‘The project is as much directed at the preventable future as at the irrevocele [sic] past... [This is] one of the most fundamental events of our age... and nobody has really probed it with direct study and psychological depth.’ 132 Lifton, who was then in Japan to study Japanese youth, decided to postpone his appointment at Yale and arranged to stay in Hiroshima. What was unique about Lifton’s research was the emphasis on victims’ voices. Contrary to previous researchers, Lifton made the long-term effects of the trauma of the A-bomb a central part of his research. He found the hibakusha ‘not only to have experienced the atomic disaster, but to have inhabited it and incorporated it into their beings, including all of its elements of horror, evil, and particularly of death’. 133 Lifton noted that survivors experienced ‘psychic closure’, by which he meant strong feelings of shame and guilt towards the dying and for being alive, and a feeling of being marked by death – being contaminated, and possessing ‘an inner sense of being doomed for

130 Robert J. Lifton, ‘Reason, Rearmament, and Peace: Japan’s Struggles with a Universal Dilemma’, Asian Survey, 1, 11 (1962), 15.
131 Author’s interview with Robert J. Lifton, 6 December 2013. Lifton’s contemporaries, including Anne Parsons, Talcott Parsons’ daughter and a trained psychoanalyst, similarly criticised psychiatrists’ obsession with childhood and their hostility toward those who were maladjusted to the nuclear world. In a letter to her father, written in November 1963 from the Yale Psychiatric Hospital where she was hospitalised following what was seen as her extreme anxiety over nuclear issues, Parsons explained, This is what an... important part of my conflict with Dr. A [her analyst at the Boston Psychoanalytic Institute]... was about, since when I was in such a panic about nuclear war and the possibility of American fascism, he simply could not or did not see that people ever have strong emotions about anything but their immediate personal relationships or whatever it is that happens before one is six years old.

Orr, op. cit. (note 8), 157. As Orr points out, Parsons’ critique of psychiatry also contained a strong gender element.
132 Robert Lifton to David Riesman, 9 April 1962, Box 15, Folder 8 (1962), The Robert J. Lifton Papers, NYPL-MSA.
133 Robert Jay Lifton, ‘Psychological Effects of the Atomic Bomb in Hiroshima: The Theme of Death’, Daedalus, 92, 3 ‘Themes in Transition’ (Summer 1963), 482.
posterity’. All of this, and especially the persistence of the little understood condition that Japanese doctors called A-bomb disease (which Lifton saw as ‘as much a spiritual as a physical condition’), caused even seemingly healthy hibakusha to be ‘plagued by underlying anxieties’. It is in these observations that the shift in psychiatrists’ attitudes towards nuclear issues had the most direct influence on the history of the concept of adult trauma. An anti-nuclear stance also meant more openness to the victims’ voices and long-term suffering, and a greater awareness than had been present in earlier research of the long-term traumatic impact of violence on the mind. It meant moving away from concentrating on the role of childhood in creating mentally defective adults who could not adjust to warfare and the modern world, and toward an acknowledgment that trauma experienced by adults could have profound and shattering effects on the soul.

Conclusion

Humanity’s encounter with the atom played a significant role in established psychiatry’s reaction to the Second World War. This had a profound, if unrecognised, impact on the history of the profession, albeit a history both complex and non-linear. There was no clear move from ‘domesticating’ the atom to opposing it and advocating for its victims. Major figures were active in both arenas. The language they used was similar, and there was much consensus about the role, indeed the duty, of psychiatrists to educate and be active in the community. Nevertheless, change was evident. Although Chisholm and others were certain that their goal was to cure a sick ‘world’ and ‘society’, the emphasis was on neurotic individuals’ defective psychology, their unreasonable fear of atomic energy, and their failure to adjust to the changing world around them. To put it simply, it was not that the world was ‘sick’, but that the individuals were ill prepared for it. Men like Chisholm, Leighton, Kubo and others (and they were indeed all, with the notable exception of Margaret Mead, men) did acknowledge that something was wrong with their world. These were men who saw themselves as being on the liberal side of the map, and who were driven by an intense concern for peace and the survival of democracy. But for many of the early post-war psychiatrists who engaged with nuclear weapons and energy, nuclear reality was a given; it was simply a question of how humans as a species would adapt to it.

With the political mood of the profession changing, psychiatrists like Frank and Lifton challenged the very foundation of that line of thinking. In conjunction with other activist-physicians from around the world, they completely changed the meaning of advocacy and the public role of the psychiatrist. They also benefited from the expanded role and resources enjoyed by psychiatry in the sixties, much of which was thanks to the early post-war psychiatrists in GAP and other groups. This allowed them to point out the systematic way that institutionalised violence affects everyone. What they did was to highlight the social context and give the victims of violence a voice. Treating the patient in isolation from the context of the structural violence of which he or she was a victim, they argued, led to a distortion of science itself. This had significant implications for work on trauma. Together with research on Holocaust survivors and Vietnam veterans (with whom he was also involved), Lifton’s Hiroshima work eventually led to the creation of the category of PTSD and its entry into the APA’s third Diagnostic and Statistical Manual of Mental

134 Ibid., 476.
135 Ibid., 476, 478.
Disorders (APA DSM III). This development had profound consequences far beyond the narrow field of psychiatry. It also finally enabled hibakusha to receive adequate care, albeit after significant delay. Such a shift would not have been possible without a rethinking of the impact of the atom and technology on the modern psyche, nor without the radicalisation of a generation of psychiatrists who tackled the impact of nuclear energy head-on, and who were determined to cure not only individuals but, indeed, a sick world.

136 See Zwigenberg op. cit. (note 12).
137 Arguably, it was only following this development, and thanks to Lifton’s own influence and contacts with Japanese doctors, that PTSD research and psychiatric care were finally initiated in Hiroshima and Nagasaki in the 1980s and 1990s. Author’s interview with Dr Tomonaga Masao, 19 February 2015 (Nagasaki), and Dr Nakane Yoshibumi, 18 February 2015 (Nagasaki). Both physicians were pioneers in supplying mental health care for hibakusha.