

3. 高齢者終末期における多職種間の連携

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要約 高齢者終末期ケアでは、一律に治療を目標にすることはできず、より安楽にすること、本人や家族の希望に沿うことが求められる。多元的な価値観が必要となり、多職種間で関わる意義を生かすため、ケア目標を共有し、目標に沿って役割を果たすことになる。医師の役割も、医療的なアセスメントと医療提供、家族の意向確認、家族への説明など多岐にわたる。終末期ケアは、地域や施設の多職種連携が試されるケアであるともいえる。

Key words : 死亡場所, 24時間体制, 緩和ケア, 死亡診断

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高齢者が終末期を過ごす場と 公的保険によるサービス

人生の終末期を過ごす場を大別すると、治療を目的とする場、療養の場、生活の場に分けられるけれども、高齢者では治療と療養、療養と生活を明確に区別することは難しい(図1)。本稿では、生活の場であり、状態によっては療養の場ともなりうる自宅や施設における多職種連携に焦点を当てることとする。

介護及び医療が必要になった場合、どのようなところで過ごすか、どの場にいるかによって公的保険サービスの利用範囲と方法は異なる。介護老人保健施設、介護療養型医療施設、病院など治療や療養を目的とした医療・リハビリ系の施設では、特殊なケースを除き施設内の資源のみで必要なサービスが完結する形となっているけれども、その他の場では高齢者の状態に応じて外部のサービスを利用する必要が出てくる。

介護老人福祉施設(特別養護老人ホーム)では、介護サービスは施設内の資源しか利用できないが、緊急時の医療サービスは外部から利用することができる。多くの施設は常勤医師がおらず、施設と契約した医師(外部の診療所または協力病院の医師)が定期的に健康管理を行っている。医師は、前回の診察から心身状態が変化したかどうかを施設看護職から情報収集し、その上で診察

し、服薬や医療処置等、その後の対応について施設看護職に指示するという連携体制の下に医療サービスを提供している。

グループホーム(認知症対応型共同生活介護事業所)や有料老人ホーム(特定施設入居者生活介護事業所)などの居住施設では、施設と居住者との契約に基づき、介護が重度になった場合など、必要に応じて介護サービスを外部から利用することができる。医療的なサービスについては、医療保険によって往診や訪問看護などを利用する。居住する施設に、診療所や訪問介護事業所が併設されている場合もある。グループホームや有料老人ホームなどの施設でも終末期ケアを提供する施設は増えており、訪問看護ステーションと24時間体制の契約を結んだり、診療所を併設して夜間対応ができる医師を確保したりして、対応している。

在宅では、介護保険による居宅サービスと、通院、往診など医療保険による医療サービスが利用できる。ケアマネジャー(介護支援専門員)が、高齢者の状態に応じて必要なサービスを組み立て、ケアプランを立てて、サービス提供者間の調整を行う。保険の範囲内で対応できないことは、その他のさまざまな資源をケアプランに組み込み、活用することができる。介護保険制度には、定期的な医学管理も含まれており、介護報酬に居宅療養管理指導として位置付けられている。医師が高齢者の自宅を訪問して高齢者本人への指導と居宅介護支援事業所、地域包括支援センター、及びサービス提供者への情報提供を行うものである。

在宅での高齢者への終末期医療は、看取りまでを担う

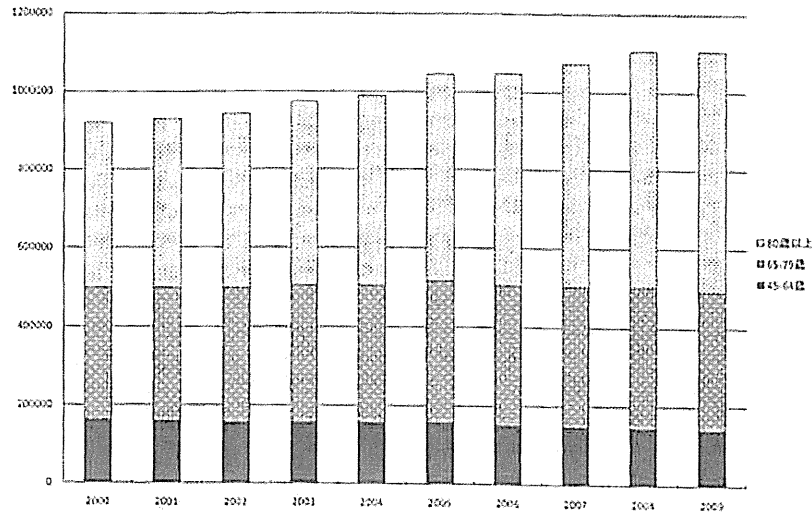


図3 年齢別死亡者数の年次推移
(人口動態統計, 厚生労働省, 文献1)

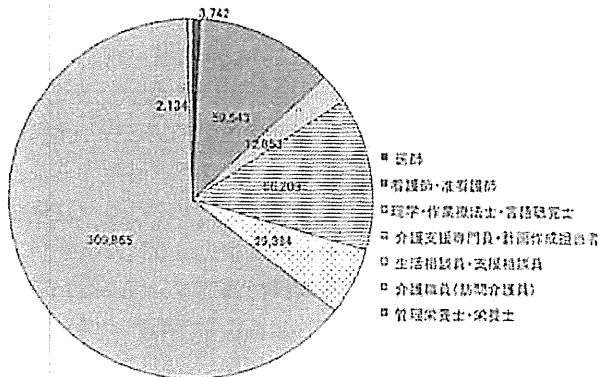


図4 居宅サービスに携わる主な職種の常勤換算従事者数
(平成20年介護サービス・事業所調査, 厚生労働省, 文献2)

ハビリテーション職(理学療法士, 作業療法士, 言語聴覚士), 生活相談員, 栄養士, ケアマネジャー(介護支援専門員)などである。

主な居宅サービスである訪問介護, 訪問入浴介護, 訪問看護, 通所介護, 通所リハビリテーション, 居宅介護支援事業所に従事する職種について, 従事者数を図4に示した。従事者数では, 介護職員が最も多く, 訪問介護や通所介護に携わっている。次いで介護支援専門員(ケアマネジャー), 看護職と続く。看護職は, 訪問看護ステーションと通所介護に携わる人が多い。医師は通所リハビリテーション以外にはほとんど関わっていない。

在宅療養における医療支援の拠点となる在宅療養支援診療所は, 全国に11,260カ所の届出がある(平成20年

医療施設調査)¹⁾。平成19年の厚生労働省調査²⁾によれば, 今後も在宅診療を積極的に継続していく意向のある診療所は6割であった。また, 高齢者終末期ケアへの取り組み状況についてみると, 平成20年の日本医師会総合政策研究機構による調査³⁾では, 死亡まで診療した場合に算定される在宅ターミナルケア加算を算定した診療所数は, 回答した全1,808診療所のうち14.1%であった。24時間体制を一人の医師で担う診療所は8割を超えており, 現行の体制では在宅終末期ケアの拡大には限界がある。8割の施設で複数の診療所連携体制があるが, 輪番制で緊急時対応を実施していたのは1割にとどまっていた。訪問看護ステーションと連携している診療所は9割を超え, 特に自施設で24時間体制に従事する看護職員がいない診療所の8割は訪問看護ステーションとの連携体制によって24時間対応を行っている。平成20年から制度化された在宅療養支援病院を加え, 今後一層, 地域の連携体制を進めていくことが, 安定した在宅終末期ケアの提供に必要であると考えられる。

介護老人福祉施設の職種別の従事者数を, 図5⁴⁾に示した。介護職が8割近くを占め, 看護, リハビリ, ケアマネジャーなど専門職がサポートする体制になっている。介護職の能力向上と, 介護職を支える体制づくりが, 多くの施設での終末期ケアの質向上における今後の課題となっている。

施設での終末期ケアにおける多職種連携

終末期ケアでは, 他のどの段階のケアよりも, 多職種によるサービスを統合的に提供する必要がある⁵⁾。医師

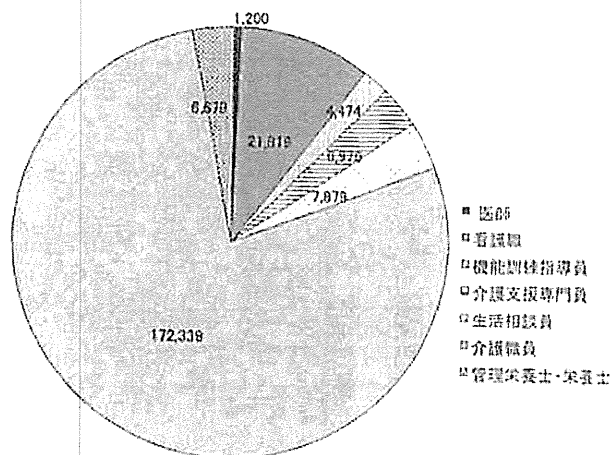


図5 介護老人福祉施設に勤務する主な職種の常勤換算従事者数
(平成20年介護サービス・事業所調査, 厚生労働省, 文献2)

の役割も重要になってくる。表1は、福祉施設における終末期ケアに特徴的なケアのプロセスを、どの職種で担う可能性があるかを例示したものである。看取りケアを実施している施設では、様々な機会に本人や家族に対して、最期の過ごし方や医療についての希望を確認している。入所時に行う場合は相談員が担当する施設が多いけれども、体調が悪化した時や入院して帰園した時などに確認する場合は、医師のアドバイスを受けながら看護職が担当することが多い。終末期に入ったと診断され、現状を詳細に説明する必要がある場合は、医師が説明し、治療内容の希望を確認することもある。終末期ケアの意思決定プロセスにおいては特に、多職種間の協働が求められる。終末期にある高齢者には、意思の確認が困難であることが多く、本人の意思を推定しながら家族と話し合い、方針を決定することになる。多様な視点と関わりの中で、最善の判断をしようとするためである。

ケアはそれぞれの専門職としての責任で提供されるが、終末期ケア全体の責任は、ケアチーム全体で共有されるべきものである¹⁾。表1に則って述べれば、日常の観察は身近で介護している介護職と看護職が、変化の手助けは医療職である医師と看護職が中心になって担うことになるが、その他の専門職も各々の専門的視点から関わり、責任の一部を共有する。終末期ケアでは、もし目標が共有されず多職種が協調できなければ、プロセスのどこかで歯車がかみ合わなくなる。高齢者本人の苦痛に気づけないまま最期を迎えることもあるし、家族の意向とずれたまま進んでいくこともある。多職種間の協働体制ができていれば多様な視点で確認することができ、ケア

が提供されている間にそれに気づける可能性が高まる。

終末期ケアにおける多職種間連携は、強いリーダーシップのある上下関係の階層的構造ではなく、多職種が横並びになり、それぞれの職種が場面ごとに多様な関わりができることが望ましい²⁾。それによって、価値観の多元性を保ち、本人または家族の意向の表出を支え、意向に沿ったケアを可能にする。また、多職種間のケア目標の共有のためには、通常のケア提供時から情報共有できる関係性をつくっておく必要がある。

在宅での終末期ケアにおけるケアマネジメント

樋口³⁾は、終末期ケア開始時期のケアマネジメントプロセスを、①高齢者の今の希望や死の迎え方の確認、②生活や人間関係を歴史的構造的にとらえるアセスメント、③意思決定過程を共有しゴールを設定、④高齢者の希望の実現をサポート、⑤多職種連携チーム及び緩和ケアチームの編成・組織化、⑥介護者が自信をもってケアできるようサポート、⑦高齢者・介護者の関係に配慮、⑧死別後までを一貫して支えるインフォーマルサポートのネットワーク化の8項目で整理している。医師は、本人・家族の意向を確認しながらケアマネジャーと連携をとりつつ、このプロセスが円滑に進むよう協働することになる。終末期ケアのマネジメントをするための教育や経験のあるケアマネジャーが少なく、終末期に必要な意思決定の集約をするスキル⁴⁾の向上が課題である。

自宅で長期間介護されている高齢者の場合、関わっているケアマネジャーが終末期であることに気づけず、アセスメントや終末期ケアに必要なプランを立てることができない場合がある。往診医や訪問看護の医療的な視点からの助言が必要なケースが増加するだろう。しかしながら、医師との協働経験のないケアマネジャーにとっては、連絡のタイミング、連絡方法、情報収集や提供の方法など、医師との連携を困難と感じる人が多い。連携を促進するための会議開催や連絡票の作成など、地域で独自のシステム化に取り組むところも増えている⁵⁾。

事例

自宅で最期を迎えた事例を紹介する。一部、修正を加えてある。()内に担当した職種を記入した。

70歳代男性、慢性閉塞性肺疾患、在宅酸素利用、アパートに独居、生活保護利用

サービス利用の経過：独居のため、デイサービスとヘルパーを利用しての生活が数年続く。少しずつ機能が低下し、10分以上の継続的な歩行が困難になり、デイサービスを中止、自宅からの外出がほとんどなくなる。

表1 福祉施設における主な終末期ケア業務への関与の例

	医師	ケアマネジャー	看護職	介護職	リハビリ職	(管理) 栄養士
本人・家族の最期の生活の希望を確認する	○	◎	○			
治療（経管栄養導入など）の希望を確認する	◎	◎	○			
症状の観察・異常の早期発見	○	○	◎	◎	○	○
余命の予測・状態変化の予測	◎		○			
身体的苦痛の緩和ケア	◎	○	◎	◎	○	○
精神的苦痛の緩和ケア	○	◎	◎	◎	○	○
死亡診断	◎					

◎：中心的な関与 ○：補助的な関与

死亡の3カ月前頃から、ケアマネジャーの訪問時、呼吸困難の訴えが増え、入院を勧めたが、本人が拒否したため、自宅での療養を継続する。

終末期ケア体制の構築：買い物、調理、掃除、洗濯など生活援助、清潔保持のための清拭（ヘルパー・毎日昼・夕2回訪問）、入浴（訪問入浴介護・週1日・本人拒否のため途中で中止）に加え、医療的支援が必要となった（在宅療養支援診療所の医師・2週に1回・看取り対応可能、病院との緊急時の連携体制あり）。また、近隣在住の妹に安否確認を依頼した。

最期1カ月の生活状況：室内の歩行も困難になり、ポータブルトイレとじびんを使用し始める。症状を緩和するための入院を説得したが、本人が拒否したため、在宅継続のプランとした。病院の担当医への情報提供を通して連携体制を維持した。自宅で最期を迎えるにあたり、近隣に住んでいる妹に安否確認と精神的な支援を依頼した。訪問したヘルパーが部屋で倒れているところを発見し、ケアマネジャーが在宅療養支援診療所の医師に連絡して死亡診断がなされた。

高齢者終末期ケアでは、一律に治癒を目標にすることはできず、より安楽にすること、本人や家族の希望に沿うことが求められる。多面的な価値観が必要となり、多職種間で関わる意義を生かすため、ケア目標を共有し、目標に沿って役割を果たすことになる。医師の役割も、医療的なアセスメントと医療提供、家族の意向確認、家族への説明など多岐にわたる。終末期ケアは、地域や施設の多職種連携が試されるケアであるともいえる。

文 献

1) 厚生労働省：人口動態調査. <http://www.mhlw.go.jp/toukei/list/81-1.html> (2011年1月31日アクセス).
 2) 厚生労働省：介護サービス・事業所調査. <http://www.mhlw.go.jp/toukei/list/24-20-2.html> (2011年1月31日アクセス).
 3) 厚生労働省：医療施設調査（平成20年）. <http://www.e-stat.go.jp/SG1/estat/List.do?lid=000001060674> (J116)

(2011年1月31日アクセス).

4) 厚生労働省：平成19年度調査 在宅療養支援診療所の実態調査 結果概要. 中央社会保険医療協議会診療報酬基本問題小委員会（平成19年度第117回）資料 <http://www.mhlw.go.jp/shingi/2007/12/s12145.html>. (2011年1月31日アクセス).
 5) 日本医師会総合政策研究機構：「在宅医療の提供と連携に関する実態調査」. 日医総研ワーキングペーパー No. 183. 2009.
 6) Ridgway V: Caring for the older person, In: Key Concepts in Palliative Care, Baldwin MA, Woodhouse J (eds), SAGE Publications Ltd, 2011, p26-31.
 7) Baldwin MA: Multi-disciplinary teams, In: Key Concepts in Palliative Care, Baldwin MA, Woodhouse J (eds), SAGE Publications Ltd, 2011, p116-121.
 8) Policzer JS: How to work with an interdisciplinary team, In: 20 common problems in end-of-life care, Kinzbrunner BM, Weinreb NJ, Policzer JS (eds), McGraw-Hill Companies, Inc., 2002, p57-72.
 9) 樋口京子：高齢者の終末期におけるケアマネジメント. 老年医学 2009; 47: 471-475.
 10) みえ地域ケア研究会：みえ地域ケア体制整備調査研究事業報告書（平成21年度厚生労働省老人保健事業推進費等補助金）, 2000.

理解を助ける問題

- 問題1. 終末期ケアについて、適切なものを2つ選べ。
- a さまざまな専門職が、それぞれ独自の考えでケアを提供する。
 - b 家族へのケアは通常おこなわない。
 - c 在宅終末期ケアを実施するためには、24時間ケアの体制を整える。
 - d 死亡診断は、医師、または歯科医師によって行われる。
 - e 末期がん患者も高齢者も、終末期の期間はほぼ同じである。

A Lifelong Journey of Moving Beyond Wartime Trauma for Survivors From Hiroshima and Pearl Harbor

Patricia Liebr, PhD, RN; Chie Nishimura, BS; Mio Ito, PhD, RN; Lisa Marie Wands, PhD, RN; Ryutaro Takahashi, MD, PhD

This study examines 51 stories of health, shared by people who survived the wartime trauma of Hiroshima and Pearl Harbor, seeking to identify turning points that moved participants along over their lifetime. The central turning point for Hiroshima survivors was “becoming Hibabusha (A-bomb survivor)” and for Pearl Harbor survivors was “honoring the memory and setting it aside.” Wartime trauma was permanently integrated into survivors’ histories, surfacing steadily over decades for Hiroshima survivors and intermittently over decades for Pearl Harbor survivors. Regardless of experience or nationality, participants moved through wartime trauma by connecting with others, pursuing personal and global peace. **Key words:** *Hiroshima, Pearl Harbor, story analysis, survivor health, war survivors*

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The authors have disclosed that they have no significant relationships with, or financial interest in, any commercial companies pertaining to this article.

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WARTIME trauma exerts a toll that challenges the human spirit for both aggressors and sufferers of aggression. The members of this research team came from countries that exerted aggression on each other within the expanse of 5 years during World War II (WWII). People who lived through the wartime trauma of Pearl Harbor and Hiroshima are elders, whose numbers are quickly dwindling as they advance into eighth, ninth, and tenth decades of living. The long-range goal of this research is to bridge contextual and cultural differences and come to know how people move along, living through and with wartime trauma, so that the wisdom of survivors can inform future generations. The specific purpose of this study was to examine the health stories of survivors of Pearl Harbor and Hiroshima, identifying turning points that moved participants along over a lifetime.

HISTORICAL CONTEXT

Pearl Harbor

The quiet of the calm Sunday morning was shattered as planes zeroed in on ships

anchored unsuspectingly in the harbor. Bombs fell from the sky, bullets strafed pasture and pavement, and torpedoes sliced through the water in a multifaceted approach bent on, bringing about maximum destruction. It was December 7, 1941, and the surprise bombing of Pearl Harbor by the Japanese military commenced at 7:53 AM.¹ and was over before 10 AM.² This event marked the entry of the United States into WWII. On December 8, 1941, in his declaration of war to Japan speech, President Roosevelt galvanized a vision for victory with the words “With confidence in our armed forces, with the unbounding determination of our people, we will gain the inevitable triumph. So help us, God.”³

Twenty-one US military vessels were hit during the bombing of Pearl Harbor, some taking their crews of young sailors down with them as they sunk; the USS Arizona entombed 1177 crew members.⁴ By day’s end, 2400 men, women, and children had died.² The majority were members of the US military; however, 68 were civilians.⁵

In addition to lives lost, more than 1100 people were injured.⁴ The majority of injuries sustained in the bombing were superficial burns, resulting from the explosion of incendiary bombs; most other injuries were caused by bullets, shrapnel, and flying debris.⁶ Resources to care for the injured were available on land and at sea. Before December 7, the US Navy had secured additional resources, including the hospital ship USS Solace, to accommodate the number of personnel based in the Pearl Harbor area.⁶ From December 7, 1941, to the end of the war, the United States lost 405 399 military personnel.⁷ Among Pearl Harbor survivors, most served in the US Navy but other branches of the military were also represented. The Pearl Harbor Survivors Association was founded in 1958, and gatherings still take place at local and regional levels.⁸ On December 7, 2006, a final commemorative reunion held at Pearl Harbor was attended by more than 1500 survivors.⁹

Literature related to Pearl Harbor focuses on the politics, leading up to and surrounding

the bombing.^{1,10} There are also collections of anecdotal first-person narratives,^{11,12} but systematic study of being there, living through, and moving beyond the experience is lacking.

Hiroshima

Almost 4 years after the bombing of Pearl Harbor and countless battles that marked the evolution of WWII, the US planes *Enola Gay* and *Bockscar* dropped their nuclear payloads on the Japanese cities of Hiroshima on August 6 and Nagasaki on August 9, 1945. The atomic bombs, known as “Little Boy” and “Fat Man,” caused death and devastation that the world had never before seen. The Pacific War ended on August 15, 1945.¹³ From the beginning of the war to its end in 1945, the Japanese death toll totaled 3 100 000; nearly one-third were civilians, and most of these were from Hiroshima and Nagasaki.¹⁴

The bombings of Hiroshima and Nagasaki accounted for an estimated 210 000 deaths by the end of 1945.¹³ Casualties and survivors in the 2 cities were mostly women, children, and older people, civilians supporting the war effort by clearing combustible debris to thwart the spread of fire from incendiary bombs. After the fall of the atomic bombs, important resources, such as health care, were disrupted; for instance, nearly 50% of the physicians and more than 90% of the nurses in Hiroshima were killed or injured.¹⁵ Food was scarce, and housing was limited due to total devastation of the landscape.

At the epicenter of the Hiroshima atomic bomb drop, “heat was so extreme that metal and stone melted, and human beings were literally incinerated”; 90% of people located within 1 km of the epicenter died.^{16(p20)} The closer to the epicenter people were, the greater was their radiation exposure. Injuries sustained at the time of the bombing consisted mostly of burns from fire and radiation and crush injuries, including tissue damage from falling debris and collapsing buildings; in addition, radiation exposure manifested over subsequent years in symptoms such as hair loss, fever, and blood

disorders, including leukemia.¹⁷ Survivors of the atomic bomb continue to suffer with radiation-related disease processes, and some have passed genetic disorders on to their children.¹⁷

There are currently an estimated 250 000 "Hibakusha" (atomic bomb survivors) living in Japan, and their mean age is now more than 75 years.¹⁸ Hibakusha are required to go through a certification process to gain official recognition of their status, and they are classified into different levels based on how they were exposed to radiation, ranging from those within 4 km of the epicenter to those who were fetuses at the time of the bombing.¹⁹

Beginning with the Atomic Bomb Casualty Commission that created anger for Japanese survivors who felt that Americans were treating them like "guinea pigs,"²⁰ the research with survivors from Hiroshima focused on the physical/biological/genetic effects of radiation.²⁰ Systematic study of the human experience of Hiroshima survivors is represented by Lifton's seminal research in 1962 on the psychological impact of survival¹⁶ and more recent work by Sawada and colleagues with 8 survivors from Hiroshima and Nagasaki.¹⁷

In the research being reported here, the team sought to systematically study health stories shared by survivors, extending research into cross-cultural arenas, where an understanding of living through and with wartime trauma could be pursued with participants from countries that had been aggressors toward each other. For the United States, the Japanese bombing of Pearl Harbor was the only wartime aggression inflicted on American soil; the American bombings of Hiroshima and Nagasaki were instances of nuclear aggression never seen before or since. This juxtaposition of aggressive actions creates a unique but compelling foundation for cross-cultural, bridge-building research.

As a future step, through collaboration with a dramaturge (K. Morris), this research will culminate in a "Peace Performance" showing 2 sides (Japanese and American) of the

wartime trauma related to the aggression of opposing nations. Verbatim theatre,²¹ a play that "acknowledges and often draws attention to its roots in real life"^(p9) will be the style of presentation for the "Peace Performance." The performance will be created for delivery to youth, serving as both a history lesson and an opportunity for self-reflection. Although details about the performance are still being determined, plans for a "talk-back" or audience dialogue after the performance have been incorporated, consistent with the verbatim theatre style.²¹ In this way, dissemination of health stories and the research findings that emerged with analysis will extend to youth audiences so that audience members may consider the meaning of wartime aggression and its resultant trauma; and, the long-range goal of informing future generations will be honored.

Theoretical guidance

Story Theory²² guided the story gathering and analysis in this research process. The theory proposes that story is a "narrative happening of connecting with self-in-relation through intentional dialogue to create ease."^{22(p207)} The theory concepts are intentional dialogue, connecting with "self-in-relation" and creating ease. From the perspective of the theory, story gathering occurs as the researcher intentionally engages another in dialogue about a health challenge. In this case, the health challenge was living through and with the trauma experienced as a result of the bombings of Pearl Harbor/Hiroshima. Connecting with "self-in-relation," a second concept of the theory is expressed as the developing story plot; plot is empirically noted as story's high points, low points, and turning points.²³ Turning points are particularly relevant when wishing to chronicle the story plot as it emerges over time. Turning points are "twists" in the story that move one's life journey along.^{22(p215)} In this case, turning points indicated shifts in ones way of being "day to day" in a journey of living through and with the trauma of war over decades.

METHODS

Sample

The health stories of 51 participants were analyzed: 28 from Hiroshima and 23 from Pearl Harbor. Hiroshima survivors living in Tokyo and Hiroshima were recruited by 1 of the 3 Japanese data collectors. Recruitment occurred through engagement with the Japan Confederation of Hibakusha Organization and from personal contact with survivors who were Hiroshima residents at the time of the bombing. Pearl Harbor survivors attending conventions in Pearl Harbor or Florida account for the majority of health stories collected by 1 of the 4 American data collectors. Data collectors recruited participants through posted flyers. Oftentimes, 1 survivor who completed an interview would recruit another. Stories were also collected in the homes of survivors, when individuals were not active and/or could not travel to conventions.

Of the 28 Hiroshima participants, 16 were men and 12 were women. Their average age was 79 years ranging from 75 to 86 years. Twenty-four Hiroshima participants were civilians and 4 were in the military. Of the 23 Pearl Harbor participants, 22 were men and 1 was woman. All were in the military. Their average age was 89 years, ranging from 82 to 92 years.

Data collection

Human subjects' approval was obtained from the Tokyo Metropolitan Institute of Gerontology and Florida Atlantic University before the study started. All participants signed consent forms before sharing their stories. Data were collected in the language of the participant using the story path approach,²² where participants were first asked about their present health experience. Data collectors defined health very broadly ("getting along day-by-day") for each participant before starting story gathering. After describing their present experience of health, participants were asked to focus on their past,

beginning with a description of their experience on December 7, 1941, or August 6, 1945, and then move up to the present to consider the impact of wartime aggression on their present health. Finally, they were asked to share their hopes and dreams for self and others.²² Data collectors practiced the present-past-future story path approach before data collection. All data collectors had experience in the health care field, representing the disciplines of medicine, nursing, and psychology. The time required for story sharing ranged from 20 to 60 minutes but generally averaged 30 minutes. For both the Pearl Harbor and Hiroshima groups, saturation was reached after 20 stories. Additional stories were collected to ensure acquisition of story nuances and to respond to the desire of survivors who wished to share their stories.

Stories were audio recorded and transcribed in the language in which they were shared (Japanese or English). The transcribed Japanese stories were translated into English by 1 bilingual researcher (C.N.), who examined the original tape recordings and the translated transcription with another bilingual researcher (R.T.) to ensure consistency between English transcriptions and original tape recordings. When disagreements about translations occurred, the 2 bilingual researchers discussed the passages in question and came to agreement before they accepted the English transcriptions for analysis by cross-cultural team members.

Data analysis

Data analysis occurred by using a cyberspace approach²⁴ that combines e-mail, Skype conversation, and occasional face-to-face meetings. The research team has found this combination of communication methods useful for conducting cross-cultural research, where research partners are at distant sites. It should be noted that the core members of this team have been working together for more than a decade, establishing a solid foundation for cyberspace analysis dialogue. Data analysis

addressed the following research questions:

1. What turning points marked movement over time in stories of health for survivors of Hiroshima and Pearl Harbor?
2. What turning-point-associated thoughts, feelings, sensations, and interpretations created meaning for participants over time?

The first research question focused on developing story plot, through turning points or "twists" in the stories, where there was a shift in living through and with wartime trauma.²² Turning points moved the survivors' stories along over many decades. The second research question addressed descriptive expressions that infused meaning into the turning points. Descriptive expressions captured turning-point meaning through thoughts, feelings, sensations, and interpretations. Expressions were synthesized to create turning-point-associated themes.

Phases of data analysis

The analysis of these data has occurred in 3 phases. In phase 1, preliminary analysis used an inductive approach to identify turning points and turning-point-related descriptive expressions²⁵ for 10 representative participants (5 Hiroshima and 5 Pearl Harbor). Phases 2 and 3 are being reported here. In phase 2, deductive approaches predominated, followed by phase 3, where inductive analytic processes were used once more.

During phase 2 deductive analysis, researchers began with turning points and descriptive expressions identified in preliminary analysis. Each analyst team member (3 in Japan and 2 in the United States) submitted via e-mail the analysis of a given Hiroshima and Pearl Harbor transcript by a specified date. In this instance, stories were read and reread by each team member, and relevant content was noted as fitting with an existing turning point/descriptive expression identified in preliminary analysis.²⁵ Cyberspace conversation (e-mail and Skype) occurred until consensus was reached about the appropriate matching of content with existing turning

points/expressions for each transcript. There was 1 team member (P.L.), who summarized the cyberspace conversations and submitted the agreed-upon groups of data within turning point/expression categories via e-mail. When story content did not fit with existing categories, it was kept separate for future phase 3 work. This process was repeated until analysis was completed for the 41 participants who were not a part of the preliminary analysis.

Finally, in phase 3, where inductive approaches predominated, 2 tasks were accomplished. First, story content that had not been grouped with existing turning points/descriptive expressions was considered independently by all team members and like content was grouped and named. Then, the entire data set of descriptive expressions associated with each turning point were synthesized and named as themes. These tasks occurred by using the cyberspace consensus process, as previously described.

Although the analysis of story data from the remaining 41 participants did not alter the turning points synthesized in the preliminary analysis,²⁵ descriptive expressions reported in the preliminary work were synthesized and expressed as descriptive themes at a higher level of discourse that reflected the complexity of the broader range of content. The analysis work occurred through biweekly e-mails and monthly Skype calls until all data were addressed to the satisfaction of all members of the cross-cultural team.

FINDINGS

Turning points and descriptive themes for Hiroshima and Pearl Harbor survivors are noted in Table 1. Each turning point will be described with themes and supportive story content.

Hiroshima survivors

Facing the disorienting aftermath of people and places with the fall of the A-bomb was the first turning point. The related themes were false sense of safety, confusing encounter

Table 1. Turning Points and Related Themes for Hiroshima and Pearl Harbor Survivors

Hiroshima (HR)	Pearl Harbor (PH)
<p>HR1: Facing the disorientating aftermath of people and places with fall of the A-bomb</p> <ul style="list-style-type: none"> • False sense of safety • Confusing encounter with unimaginable death and destruction • Being called to serve Japan • Trying to get back to life as normal 	<p>PH1: Coming to grips with the reality of a Japanese attack and scrambling to respond</p> <ul style="list-style-type: none"> • Having normal Sunday routine disrupted with unexpected Japanese attack • Responding to call to arms during threatening chaos of air attack • Witnessing unbelievable destruction but doing what needed to be done
<p>HR2: Becoming Hibakusha</p> <ul style="list-style-type: none"> • Acquiring Hibakusha certification • Personal suffering extending over time • Encountering, reevaluating, and resigning self to living with complexities of being an aging Hibakusha 	<p>PH2: Honoring the memory of their war experience and trying to set it aside to get on with usual valued activities</p> <ul style="list-style-type: none"> • Focusing on the positive and seeing health in the context of aging-related life circumstances • Reflecting on lessons offered/learned from challenges faced during youth • Having the war experience live on
<p>HR3: Reaching out to create meaning/purpose that is consistent with cherished peace</p> <ul style="list-style-type: none"> • Moving beyond self to heal • Above all, valuing peace 	<p>PH3: Embracing connection as a source of comfort and understanding</p> <ul style="list-style-type: none"> • Wishing for a secure future for self and others • Cultivating human connection in spirit of seeking peace

with unimaginable death and destruction, being called to serve Japan, and trying to get back to life as normal. The themes suggested a movement over time that began with the fall of the A-bomb and continued over the first months of survival.

Hiroshima survivors did not know what they were seeing when the A-bomb fell. In fact, they were generally dismissive of the Enola Gay because there had been no siren warning. One participant said:

I was at the train station waiting for my transfer train, then I saw a B-29 flying above. Strange, I thought. There's a B-29 flying, but why isn't there air raid alarm going off? People were trained to automatically go into nearby bunkers to evacuate whenever the alarm goes off. . . What's going on? Most of the people were looking up.

After these first moments, participants slowly comprehended that something ex-

traordinary had happened. Two survivors described it this way:

I felt like I was inside of sand curtain . . . it was like eclipse, I lost the light of that sunny summer day. "What is this? How did this happen???" My thinking wasn't functioning. Later I understood that I was inside of that mushroom cloud.

"Hey look! Something white dropped!" . . . When I regained my consciousness and I looked around, there was nothing and nobody around. There were people standing around me waiting for the train. Where did all those people go?

History later would tell us that the intensity of the A-bomb vaporized those at the epicenter if they were not protected or sheltered in some way.²⁶ Survivors shared disturbing recollections:

So many dead people everywhere, and alive people screaming and calling for water and help, "Water! Please give me water!" "Heeeelp, please!!!" It was

Hell. People trying to catch me, cling onto me saying "Please help!", I tried to get away, stepped on dead bodies, I had to, there were no open spots on the ground to put my feet on.

My brother walked over through Hijiyama to home. He told me that when he was walking . . . he had shed his skin which was dangling down from his hands as if he was taking off gloves . . . he pulled them off just like taking off gloves. 'I threw them away on Hijiyama' he said.

there was a mother holding a child, black like charcoal, both dead.

A common description of realizing that family members were dead is provided in this survivor's description:

How did they know it was my father when it (the house) was all burned down and nothing was left? When they dug up around the area, they found this big coin wallet . . . my father used to always wear it around his belt, and right next it they found some bones, they said "Look, here he is. This must be his bones here," and so they brought the bones home.

In the midst of their struggle, participants described the call to serve their country. Even children were expected to place loyalty to the Emperor above all else. One participant who was 18 years old when the A-bomb fell said:

After probably an hour had passed since A-bomb, someone came to deliver an order, said our school has been destroyed, and we are to go back to the school right away to rescue the Goshinei, the picture of the Emperor. We walked . . . in full residual radiation, we walked all the way about 4 km to the central Hiroshima.

As the months moved along, participants tried to get back to normal while living with the effects of the radiation and profound losses.

So about half a year had passed and I went back to school. I constantly had throbbing pain in my head and I couldn't focus, my grades came down and I felt like I don't feel like doing anything . . . that was every day.

My hair started falling out, became completely bald, and I had many many wounds, scars . . . but I wanted to have my own house more than anything. I wanted my own family. So I got married in

1947. We didn't have wedding ceremony or anything, but he was willing to marry me, so we got married.

This quotation transitions to the next turning point, becoming Hibakusha (A-bomb survivor), hinting at the challenge associated with finding a mate who was willing to overlook one's Hibakusha designation.

Becoming Hibakusha (A-bomb survivor) was the second turning point. The associated themes were acquiring Hibakusha certification; personal suffering extending over time; and encountering, reevaluating, and resigning self to living, with the complexities of being an aging Hibakusha. Several participants talked about the bureaucratic process of being certified as an A-Bomb survivor:

After long enough years, in 1970 they started granting people with secondary Hibaku (A-bomb) status. Some physicians who were working at the hospital back then all stepped up to be witnesses, encouraged us nurses to apply, so we all applied at the same time and got certified.

There were health benefits associated with certification, but participants were wary of the stigma that came with the designation.

Hibakusha were treated like a carrier of contagious disease, didn't get treated like human. That's how society had been to Hibakusha. Getting married or getting a job was very difficult if you were Hibakusha. I used to go to public bathhouse when I went to Tokyo on business . . . how people stare at you, it was unbearable.

I started getting sick but I didn't tell anybody about it, because if people knew you got Genbaku (A-bomb) and you were sick?! People discriminated those who had Genbaku, you know? When you get married, or when you do business with someone, people gossip "She is Genbaku, did you know that?"

A striking quality of this turning point is the enduring nature of becoming Hibakusha. People carry guilt for decades; they live with losses that are physically etched in their bodies and figuratively etched in their minds; and they never stop worrying about future generations of family members. The next series of

quotations exemplifies these qualities of becoming and being Hibakusha:

Those feelings of guilt and blame come up in my head when my body is sick or not doing well. I killed my classmates, 23 friends, with that “rock, paper and scissors” to decide which group goes to building clearing duty. I blame myself for not being able to die with them that day . . . all those years, they have been in my heart.

See here? It was cut all the way to the bone here. You can normally move those parts but mine don't . . . It's been 61 years now and those cut wounds also became keloids.

My children, my oldest son, he had a baby and after 20th day, this baby got bone marrow inflammation in his head . . . all of this has nothing to do with my body. Those things happening to children and grandchildren are much more troubling . . . I was filled with feeling “I am so sorry” to my children and my grandchildren.

Overall, Hibakusha who shared their stories came to resign themselves to suffering while taking pride in their capabilities and making the best of their situation.

Economy was rapidly growing then, I just put myself into working hard. But little (time) after I became 40, my liver got sick. There were those people selling A-bomb bricks, “Oh mercy me! I'm a poor Hibakusha, please do this, do that for me”, beggars, there were many like that. I resented it, be like a beggar, I resented it so much. Even with my liver, I'd rather live with my own hands.

Another participant makes note of medical care benefits while weaving recollection of August 6 with optimistic appraisal of her current situation:

Burned, red and swollen all over the body, not even underwears on them, living ghosts, that's what they were . . . After seeing all that, I thought I would consider myself happy. Now at this point I am healthy (even with cancer), I am grateful for that. With that booklet, I don't have to pay medical fee what so ever.

Reaching out to create meaning/purpose that was consistent with cherished peace was the third turning point for Hiroshima survivors. Related themes were moving beyond self to heal, and above all, valuing peace. Some

Hiroshima survivors created meaning for living by eventually sharing their stories and demonstrating for peace. One survivor said:

There are people who still at this day can't tell others that they are Hibakusha. But we should, we should tell our stories and pass it on. One day when nuclear weapons are banned from this world, Hibaku (A-bomb suffering) testimony will no longer be needed. But until that day we are needed to voice our stories, people won't know unless we talk.

Furthermore, participants' commitment to Hibakusha extends beyond Japan to all places where nuclear radiation has touched people's lives.

On the monument, we put names of those who died with Genbaku (A-bomb), not just people in Tokyo, but Hibakusha all over the world, Hibakusha who live in Korea, Hibakusha who live in the United States, Hibakusha who live in Brazil, and Hibakusha in Chernobyl . . . I wish to connect to the world . . . many of us Hibakusha think of it as purpose/meaning of life, we all have this idea that we have to raise our voices otherwise it will be disaster.

The turning points and associated themes create an image of getting along day by day seldom captured in existing health literature about people who survived the bombings of Hiroshima. A comparable description for Pearl Harbor survivors will illuminate distinct and common experiences that speak to moving beyond wartime trauma.

Pearl Harbor survivors

Coming to grips with the reality of a Japanese bombing and scrambling to respond was the first turning point for the Pearl Harbor survivors. Related themes were having a normal Sunday routine disrupted with unexpected Japanese bombing, responding to the call to arms during threatening chaos of an air bombing, and witnessing unbelievable destruction but doing what needed to be done. Most of the participants shared their recollection that they were hearing routine maneuvers on Sunday morning. A common example

of this misperception was expressed by one sailor who said:

I was in the process of washing dishes when the attack started. And, we didn't expect it . . . we heard the bombing . . . and we didn't know what to make of it. We thought it was some kind of war game or something . . . I went up to see what kind of a show was going on and then I saw the first Jap plane drop a torpedo on the West Virginia.

Many participants shared stories recalling exactly what they were doing when the bombing started. Although they were in the military and prepared for fighting, the start of the bombing left an indelible mark of "surprise" on their memory. One participant vividly shared the surprise disruption of a normal Sunday morning:

I was in my sack, and somebody hollered down . . . "You gonna' go to chow?" I said, "No . . . I'm gonna sleep in a little bit." . . . He no more than left . . . and he comes screaming down, "Get up! Come up on deck!" He says. "The Japs are attacking!" . . . I got up on the main deck, and by that time, two dive bombers were going right over the top, Jap dive bombers, they'd already dropped their bombs on the Arizona over there. They were going right over the top of us.

Although some participants immediately recognized that these were Japanese bombers, for others, this recognition was a significant dimension of their surprise. Once recognized as an enemy attack, a rehearsed military response was set in motion.

when I got back to my gun stations and looked up and there were two planes coming down . . . at my ship and . . . I saw the rising sun. I thought, "Oh my God. These are not Germans. These are Japanese." And, I can see the little old Jap sitting up there grinning, coming in treetop high, coming in with his bomb, and . . . we began to shoot. And, we shot him, and he fell over in the pineapple field with his plane. But, he dropped his bombs right at the edge of the ship . . . killed I'd say about thirteen guys.

One participant expressed the idea of being "called to arms" very succinctly:

I think we were too young to know . . . I was 19 . . . We just weren't ready for it. That's what you were trained for but you didn't know what you're

were training for 'till somebody started shooting at you . . . at that point, right there, it was just react.

The bombings at Pearl Harbor were over within 2 hours. However, the war trauma became real for survivors in the days ahead. In the days after December 7, participants described the immediate aftermath and necessary extraordinary actions, as noted in the following quotations:

There were too many kids in the water. And it's hard to pass up someone in the water. We saw real early on that . . . the ones that were squished bad . . . you couldn't get em' in the launch. You couldn't do nothing for em' . . . We took loads of em' and we could hold about 60 . . . In the meantime, we went back out and it just kept repeatin' itself.

I didn't think it could happen to us, but it did . . . it was terrible, all that fire and the water was on fire, and guys jumping off . . . the Arizona and all the ships over there. It was just terrible, and if you went out there to get one of 'em, why you'd just get him by the hand, that's all you got. But, I was young back then . . . I just knew we were at war.

These men, at a very young age, pushed through wartime destruction to do what needed to be done. Their humanness and military responsibility were imperceptibly intertwined as they accepted the reality that "we were at war."

Honoring the memory of their war experience and trying to set it aside to get on with usual valued activities was the second turning point for Pearl Harbor survivors. The related themes for the turning point were focusing on the positive and seeing health in the context of aging-related life circumstances, reflecting on lessons offered/learned from challenges faced during youth, and having the war experience live on. Pearl Harbor participants easily talked about their health in the present, disregarding the impact of war trauma. They often said that they had no "trauma" as a result of the war, and they turned their attention to the positive when discussing health and everyday living:

As far as attitude and all is concerned, I'm a very optimistic person. And, I look toward the future, Just

take it a day at a time and do what you can, accept the consequences of your own life . . . That's about my philosophy . . . I look forward to each day.

What makes me feel healthy is (that) when we're (he and his wife) out for a brisk walk . . . I have no problems. In fact, she has a problem keeping up with me . . . at 87, a lot of my good friends are gone . . . and some of my friends . . . don't have the stamina that I have.

These survivors lived through the great depression, and they attributed "lessons learned" to the depression and to their military experience:

Well, during the Depression . . . it was very important to do what you could to feed yourself and your family. And, it was hard times . . . the majority of people at all levels were in really dire straits . . . So, the important thing was to do what you could to better your life, and then the war came along and it was the same situation. Do what we can to better the situation and then get back to normal.

I told my dad, "I want to go to college." He said, "I ain't got no money to send you to college." So, that's why I went in the Navy. But, I got a good lesson from it. It taught me a lot . . . It made me think. It made me realize things . . . how to survive and how to support a family.

In spite of this generally optimistic perspective and the denial of war trauma, survivors talked about haunting memories. It was common to have survivors deny the impact of war trauma and then talk about how their experience lived on:

Guys were being hit out at sea . . . I was on a working party one time . . . some of 'em had been killed a week or ten days ago, stowed down there. I never forgot the odor. I thought of that many times in the last 60 years . . . I thought about what happened . . . my job was to be sure the name tag was stuck in there with them in a casket (big sigh).

Others normalized their experience by attributing it to emotion:

No, I don't get emotional, now. But, health-wise, I don't think I've ever experienced anything but an emotion . . . Physically, I'm OK, but it's an emotion . . . (tape shut off at participant's request) . . . Remember, we had no post-trauma treat-

ment . . . they just would grin and bear it, and I think maybe that's why I never have recovered from the memory. That's why it's very emotional for me.

Embracing connection as a source of comfort and understanding was the third turning point for Pearl Harbor survivors. The two themes associated with this turning point were wishing for a secure future for self and others and cultivating human connection in a spirit of seeking peace. Pearl Harbor survivors voiced their appreciation for connection with other veterans:

I enjoy the companionship of the people at my time who were in the military . . . I'm not real active in Pearl Harbor Survivors, but I do like to attend (the gatherings) . . . and we fight the war time and time again and it always seems to come out the same . . . Listening to their conversations . . . their relating of incidents and then that they pay attention to some of my stories, too. It's camaraderie . . . being heard by peers . . . it's satisfying . . . ego building. I'm not on the periphery . . . I'm a part of it.

Focus on a secure future included family and also extended to a broader world view that began to overlap with intentions for peace. When talking about wishes for the welfare of family, survivors talked in generalities and specifics:

wishing next generations have a good life and nothing happens, which means they do not get any trouble from some of crazy kooks overseas who bomb . . .

I wish they (granddaughters) could have the same advantages that we had when I was growing up . . . peace, prosperity . . .

One participant reflected on the losses that characterized war trauma and voiced his wish for avoiding war in the future:

You never want to go through something like that again . . . We lost a terrible amount of men there besides the amount of men was wounded and crippled the rest of their lifetime, and my own opinion after years later . . . I told my own children . . . "Years later after this experience, I just hope you never have to go through something like that."

Referring to their discomfort with war, participants talked about wishing that the government would be connection seeking instead of power seeking, avoiding declaration of war . . . with words like "as long as people don't come at us, I don't want to go at them for war." The following participants shared specific thoughts about war in the Middle East but then moved beyond the current war:

I'm very much disturbed by war . . . I say, "Support the troops." Although, almost from the start, I said, "This (war) is a mistake."

I feel bad them boys that's going over yonder to war. And, I know they're young . . . about like me when I was about eighteen . . . I don't know what the answer is, but there's not enough love and there's too much hate and greed in this world . . . I see that.

Attention to getting on with usual everyday living predominates in the words of the Pearl Harbor survivors. One has a sense that the wartime trauma that is part of their history infuses their present with a sense of pride.

DISCUSSION

In his address at Pearl Harbor on the 50th anniversary of the bombing, the then-President George H.W. Bush shared his recollection of deciding 50 years earlier on December 7, 1941, that he would join the US Navy. He was 17 years old, and he enlisted 6 months later when he turned 18 years old, making his way to Pearl Harbor in 1944, where he recalled the shock that he felt with the devastation still existing in the Harbor.²⁷ At this 50th anniversary memorial, President Bush said: "As you look back on life and retrace the steps that made you the person you are, you pick the turning points, the defining moments. Over the years, Pearl Harbor still defines a part of who I am. To every veteran here, and indeed to all Americans, Pearl Harbor defines a part of who you are."²⁷

Just as the bombing of Pearl Harbor contributed to the self-identity of its survivors, the bombing of Hiroshima contributed to sur-

vivor self-identity. However, the nature of the identity was fundamentally different. While Pearl Harbor survivors were celebrated as heroes with a legacy of pride and a feeling of connection with the whole of their homeland, Hiroshima survivors were stigmatized with a legacy of shame and feelings of isolation. Based on his research with 75 survivors, Lifton provided a perspective regarding self-identity of Hiroshima survivors: "exposure to the atomic bomb changed the survivor's status as a human being in his own eyes as well as those of others."²⁸(p1430) In light of this powerful impact on self-identify, Lifton addressed 5 qualities of surviving trauma,^{16,28} including death imprint, distrust in human relationships, psychic numbing, survivor guilt, and moving beyond the experience to create a new identity and new relationship with one's world.

These 5 qualities described by Lifton^{16,28} provide a useful structure for considering how the participants in this study lived through and with wartime trauma. Each quality will be used as a lens for reflecting on the experience of survivors from Hiroshima and Pearl Harbor, thereby enabling an understanding of the simultaneous struggle/force to create meaning within the context of wartime trauma.

Death imprint

This quality, which refers to the impact of engaging with unimaginable death and destruction,²⁸ arises in the first turning point. Both the survivors from Pearl Harbor and those from Hiroshima talked about witnessing "hell on earth," as they were consumed with the immediate aftermath of the bombings. While it is possible to expect that military personnel would be more prepared for this experience, the words of Pearl Harbor participants suggest intermittent but powerful unsettledness associated with the "death imprint," such as odors that reminded them of death or recollections of dismemberment: "you'd just get him by the hand, that's all you got . . ." To some extent, it seemed that

believing in the greater purpose of their mission to secure safety for themselves, their families, country, and the world ennobled and gave meaning to their "death imprint" experience. In contrast, it was impossible for Hiroshima survivors to find meaning in the death, which they witnessed in their atomic bomb experience. The atomic bomb was the first-ever weapon of mass destruction, annihilating all life forms at its epicenter. For survivors, life, as they knew it, was gone, and there was nothing noble about what they witnessed. It left an indelible overwhelming mark that surfaced again and again as people around them continued to mysteriously exhibit unexplainable symptoms and die. The "death imprint" was steady and sustained, leaving them to feel unsettled even as they became parents and grandparents. The purpose-related distinction (noble cause vs meaningless destruction) noted in this discussion of the "death imprint" influences other qualities of surviving wartime trauma for these participants.

Distrust in human relationships

Lifton described distrust in human relationships as a "breakdown of faith in the larger human matrix supporting each individual life."^{28(p153)} He identified this quality as a core characteristic in survivors from Hiroshima when he collected his data more than 4 decades ago. In contrast, Hiroshima survivors who shared their stories in this study seldom noted distrust in human relationships. The difference between Lifton's early findings and those from this study could be related to changing views emerging with aging and the passing of time. From the stories shared by these older survivors, one could discern that the stigma of being Hibakusha shook their trust in human relationships so that they often tried to hide their Hibakusha status. They were not confident that people would accept them for who they were, in marriage, in bath houses, or at work. This lack of confidence might represent distrust that contributed to

the lengthy silence they maintained about their experiences.

Interestingly, both Pearl Harbor and the Hiroshima survivors noted outside of recorded dialogues that they had not told their stories for decades. Other populations who suffered overwhelming trauma, such as Holocaust survivors, are also known to maintain silence about their experience, partly because those outside the experience do not want to hear about it and partly because it is so unbelievable that they fear that others will dismiss them.^{17,29} At this point in their lives, Pearl Harbor survivors described comfort in story sharing. They explicitly noted pleasure in connecting with other veterans to share their war stories in a spirit of pride and understanding. Even for many Hiroshima survivors in our sample, story sharing had been elevated to a position of importance in their peace-promoting mission, suggesting that their intention to accomplish their mission superseded distrust that demanded silence.

Psychic numbing

Lifton²⁸ addresses this quality of trauma, psychic numbing, as a "cutting off" from feelings. It was most often described as a dimension of the immediate aftermath of the bombings. Psychic numbing was the context for the comments of one Hiroshima survivor who described stepping on bodies because there "were no open spots on the ground" to put his feet; and it was implicit in the tenor of Pearl Harbor survivors when they talked about "doing what they had to do." Once again, like the "death imprint," this quality of surviving trauma extended beyond the immediate aftermath for survivors of Hiroshima. To some extent, it was a necessary quality of getting through the months after the bombing. In fact, Lifton^{28(p154)} referred to it as a "means of emotional self-preservation."

Survivor guilt

Survival guilt surfaces repeatedly in the health stories of Hiroshima survivors,

weighing heavily on their hearts, as noted by one of the participants who talked about being spared because of her lot in a "rock, paper, scissors" game that put her out of harm's way. Participants' intention of ensuring "No More Hiroshimas"²⁶ is expressive of simultaneous appreciation for living, desire to ease guilt, and commitment to create meaning for those who died and for themselves. Survivors talked about the importance of telling their stories as a way of sensitizing younger generations to the dangers of nuclear war. Their passion to pursue their mission of banning nuclear weapons was fueled by their belief that they were spared for a reason. For Pearl Harbor survivors, guilt was not apparent, again, probably because of the meaning associated with their war effort. They expressed gratitude for survival, and many directed energies to ensure that others "Remember Pearl Harbor," honoring those who died for their country. The sentiment of "Remember Pearl Harbor" brings a proud past focus to the present in an effort to memorialize war losses. In contrast, "No More Hiroshimas" brings a future focus to the present, emphasizing both the mission of banning nuclear weapons and the complexity of "being spared for a reason."

Moving beyond trauma

In 1981, Silberner suggested that Hibakusha would be less likely to overcome their traumatic memories as they aged.³⁰ In contrast to her prediction, the participants in this study moved beyond wartime trauma to create lives that carried them through 7, 8 and 9 decades. To some extent, these participants excelled at surviving. They were resilient. Bonanno defines *resilience* as the ability to sustain balance in the face of extremely unfavorable circumstances.³¹ As an example, life stories of WWII veterans from the former Soviet Union indicated an overriding sense of well-being in spite of war trauma.³² Well-being emerged as they maintained their So-

viet identity and took a reflective view of their lives.³² Well-being in spite of war trauma warrants thoughtful consideration; and "sense-of-self" arises as a thread of well-being in the literature and in these data.

The third turning point encompasses ideas about fostering "sense-of-self" through meaning-making connections. From the perspective of Story theory,²² survivors from Pearl Harbor and Hiroshima integrated wartime trauma into the "who-they-were," creating a coherent "sense-of-self." It was hard work, particularly for Hiroshima survivors who were stigmatized because of radiation exposure and cut off from reality, as they knew it before August 6, 1945. For both Pearl Harbor and Hiroshima survivors, constructing "sense-of-self" in the context of wartime trauma was a meaning-making endeavor steeped in cultivating valued connections and imbued with appreciation for peace.

CONCLUSION

While there are differences in the wartime trauma experienced by participants, their stories indicate that there are similarities as well. Surprise catapulted them into "hell on earth" that was integrated into their "sense-of-self," shaping resilient aging over decades where patterns of connecting defined meaning making. Pursuit of peace shone through their remarkable resilience. Their stories demand attention as nations stand on the brink of wartime decisions and nuclear disasters, even today. At the very least, this research has heeded a call for collaborative study¹⁷ to honor the voices of survivors from opposing nations during WWII. At best, this research and its forthcoming peace performance will establish a forum for disseminating the wisdom of survivors informing future generations so that messages about surviving wartime trauma are not lost but treasured as lessons that contribute to personal and global peace.

REFERENCES

1. Prange GW, Goldstein DM, Dillon KV. At *Dawn We Slept: The Untold Story of Pearl Harbor*. New York, NY: Penguin USA; 1991.
2. Van Der Vat D. *Pearl Harbor: The Day of Infamy—An Illustrated History*. New York, NY: Basic; 2001.
3. Roosevelt FD. *The Declaration of War to Japan Speech*. http://www.famousquotes.me.uk/speeches/Franklin_D_Roosevelt/index.htm. Published December 8, 1941. Accessed January 3, 2011.
4. Puttre M. Pearl Harbor attacked: Japanese forces achieve complete surprise. *J Electronic Defense*. 2001;24(6):68-69.
5. Barker AJ. *Pearl Harbor*. New York, NY: Ballantine; 1969.
6. Naval History and Heritage Command. Pearl Harbor navy medical activities. <http://www.history.navy.mil/faqs/faq66-5.htm>. Original source published 1946. Accessed January 13, 2011.
7. Fischer H, Klarman K, Oboroceanu MJ. *CRS Report for Congress. American war and military operations casualties: Lists and statistics. Table 1. Principal wars in which the United States participated: U.S. military personnel serving and casualties*. http://www.law.umaryland.edu/marshall/crsreports/crsdocuments/RL32492_05142008.pdf. Published May 14, 2008. Accessed January 14, 2011.
8. Pearl Harbor Survivors Association. History. <http://www.pearlharborsurvivorsonline.org>. Accessed January 12, 2011.
9. Pearl Harbor Survivor Project. Pearl Harbor survivors gather for "final reunion." <http://www.pearlharborstories.org/node/1289>. Published October 22, 2008. Accessed December 1, 2008.
10. White GN. Moving history: the Pearl Harbor film(s). In: Fujitani T, White GM, Yoneyama L, eds. *Perilous Memories: The Asia-Pacific Wars*. Durham, NC: Duke University Press; 2001:267-295.
11. Lord W. *Day of Infamy*. New York, NY: Henry Holt & Co; 1957.
12. Carroll A. *Behind the Lines*. New York, NY: Scribner; 2005.
13. Simizu H. *No More Hiroshima, Nagasaki*. Printed in Japanese and English. Tokyo, Japan: Nihon Tosho Center; 2005.
14. Yoshida Y. *Asia-Pacific War*. Tokyo, Japan: Iwanami Shoten; 2007.
15. Hersey J. *Hiroshima*. London, England: Penguin Books; 2001.
16. Lifton RJ. *Death in Life: Survivors of Hiroshima*. New York, NY: Random House; 1967.
17. Sawada A, Chaitin J, Bar-On D. Surviving Hiroshima and Nagasaki—experiences and psychosocial meanings. *Psychiatry*. 2004;67(1):43-59.
18. Japanese Ministry of Health, Labour and Welfare. <http://www.mhlw.go.jp/bunya/kenkou/genbaku09/01.html> [in Japanese]. Published October 22, 2008. Accessed December 1, 2008:1.
19. Japan Red Cross Society. Outline of atomic-bomb survivors hospital division. http://www.hiroshimamed.jrc.or.jp/english/Atomic_bomb.html. Published 2006. Accessed January 13, 2011.
20. Brown H. Hiroshima: how much have we learned? *Lancet*. 2005;366:442-444.
21. Hammond W, Steward D. *Verbatim Verbatim*. London, England: Oberon Books; 2008.
22. Liehr PL, Smith MJ. Story theory. In: Smith MJ, Liehr PL, eds. *Middle Range Theory for Nursing*. 2nd ed. New York, NY: Springer; 2008:205-224.
23. Liehr PL, Smith MJ. Refining story inquiry as a method for research. *Arch Psychiatr Nurs*. 2011;25(1):74-75.
24. Liehr P, Takahashi R, Liu H, Nishimura C, Ito M, Summers L. Bridging distance and culture with a cyberspace method of qualitative analysis. *Adv Nurs Sci*. 2004;27(3):176-186.
25. Takahashi R, Nishimura C, Ito M, Wands LM, Kanata T, Liehr P. Health stories of Hiroshima and Pearl Harbor survivors. *J Aging Humanities Arts*. 2009;3:160-174.
26. Ogura T. *The Atomic Bomb and Hiroshima*. Tokyo, Japan: Liber Press; 1994.
27. Bush GHW. *Fiftieth Anniversary of Attack on Pearl Harbor*. <http://library.cqpress.com/historicdocuments/document.php?id=hsdc91-0000911027&type=hitlist&num=0>. Published December 7, 1991. Accessed January 11, 2011.
28. Lifton RJ. *History and Human Survival*. New York, NY: Random House; 1970.
29. Rosenblum R. Postponing trauma: the dangers of telling. *Int J Psychoanal*. 2009;90:1319-1340.
30. Silberner J. Psychological A-bomb wounds. *Sci News*. 1981;120:296-298.
31. Bonanno GA. Loss, trauma, and human resilience: have we underestimated the human capacity to thrive after extremely aversive events? *Am Psychol*. 2004;59:20-28.
32. Coleman PG, Podolskij A. Identity loss and recovery in the life stories of Soviet World War II veterans. *Gerontol*. 2007;47:52-60.

老年内科

標榜をめざして

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4. 老年症候群の考え方と高齢者の寝たきりの原因と対策

はじめに

老年症候群は高齢者に多く見られ、医療だけでなく介護、看護が必要な、症状や徴候の総称と定義される。教科書では、少なくとも50以上の老年症候群が挙げられており、その意味、分類、対策など多岐にわたる。

本稿では、老年内科を実地に診療する医師にとっての必須知識に的を絞る。

老年医学の診断学としての老年症候群

老年症候群の特色はまず、頻度が高いこと、複数の症状を併せ持つことである(図1)。なぜ老年医学の知識が必要か? に対する答えは下記のエピソードを読んでいただきたい。

大学で、長年消化器の専門家として、内視鏡専門医として臨床で腕をふるい、教職も務め、「最近どの診療科も高齢者が増え、どの科も老人を診ているので、特に老年内科などという科はいらない」と認識し、公式にも発

言していた人が定年後、老人保健施設の医師になった。入所者から、「先生、腰が痛くてトイレが近く、夜中に起きてしまうから何とかしてください」と言われ、職員から「同じことを何度も聞くし、夕方には不穏になります。食事時にむせることも増えてきました」との追加情報があった。「整形、泌尿器、精神科、耳鼻科など受診したのか?」と職員に聞くと、「退所しなくては受診できません」と言われ、困っていると、入所者に「先生は年寄りのことを何も知らないね」と容赦なくつぶやかれ、胸に堪えた。

このように老年医学の専門医であれば、1人でごく普通に日常診療で複数の老年症候群の診断と治療、生活指導までをこなす必要があることが、専門診療科と異なる特色である。

時間軸を基に理解する

老年症候群は、特に疾患や外傷などなくても誰にでも起きる生理的老化に伴う症状(感音性難聴、暗順応による夕刻の視力低下、夜