

首都医療安全保障の創生

～都民の命のための新しい視座～

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命の視点からみた「強靱化」の本質

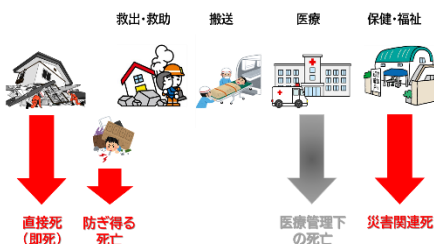
今年に関東大震災から 101 年である。神奈川県西部を震源とするマグネチュード 7.9 の地震では、200 万人が家を失い、死者は 10 万人を超えた。死因を見てみると、87%が火災による焼死、11%が建物倒壊による圧死であった。一方、今後想定される首都直下地震では、6150 人の死者数が見込まれているが、その内訳は、40%が火災、60%が建物倒壊による。

地震で失われる命

東京 DMAT は今年創立 20 周年を迎える。年間 400 件を超える活動実績をほこり、地震を含めさまざまな災害での活動が期待されている。過去の大地震によって失われた命を分析してみると、4つに分けることができる。①発災直後の直接死(即死)、②救出や救助されるまでに失われる死、③搬送された病院での死、④避難所や避難生活中の死。このうち医療介入の効果が期待されるのは、2番目に含まれている可能性のある救出・救助や現場での処置が早ければ助かる死(防ぎ得る死亡)で、阪神・淡路大震災では約 500 人と推計されている。しかし、同地震の 85.7%、東日本大地震の 82.3%など死亡者のほとんど

被災者の命はどこで失われるか？

は救出・救助の介入の余地のない直接死(即死)である。



直接死を防ぐ

地震による死者数を減らすには直接死を回避することが最も効果的で、基本戦略は住宅の耐震化や木密地域の区画整理など建築や都市工学に依拠する。東京都はこの政策により 2030 年までに首都直下地震による死者数を半減させるとした。この戦略は豪雨や河川氾濫などの災害に対しても同様で、都市強靱化の本質といえる。

東京が直面する安全保障危機

一方、政府の『国家安全保障戦略』においてはわが国が戦後最も厳しく複雑な安全保障環境に直面していることが示され、首都東京はその脅威の渦中にある。テロや事件を未然に防ぐことが安全保障の要諦であることは否定しないが、事案の発生を 100%阻止することはできない。

必要とされる新たな安全保障の視座

「非対称兵器」の登場による近代軍事技術の革命的变化の結果、事件が起こっても「誰が攻撃したのか」、「何が目的か」、「何を使用したのか」が容易にわからない。例えば生物兵器では、自然感染のアウトブレイクなのか、バイオテロなのかの判別は極めて困難である。都民が予告なしに突然脅威に晒される危険性は日々増している。

東京を医療安全保障の拠点に

こうしたテロや爆発などの特殊事案に「都民の生命・身体の安全確保」の観点から具体的な戦略を与える医療安全保障の整備が急務である。これには、従来の救急・災害医療に都民の参画を加えた体制のパラダイムシフトが必要となるほか、従来の日本にはない医療知識や技術の導入、情報(インテリジェンス)機能の強化、政策支援のための専門家組織の整備など課題が山積する。テロなどをも見据えて都民の生命保護を盤石とすることは、新たな都市強靱化の要件であり、国家安全保障に新たな視座を与えるものとなる。

Creation of medical security in the capital

-A new perspective for the lives of Tokyo residents

Yoshihiro Yamaguchi

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The essence of “resilience” from the perspective of life

This year marks 101 years since the Great Kanto Earthquake. The magnitude 7.9 earthquake that struck western Kanagawa Prefecture left 2 million people homeless and killed more than 100,000 people. Looking at the cause of death, 87% were burned to death by fire, and 11% were crushed to death by collapsed buildings. On the other hand, 6,150 people are expected to die in a future earthquake directly hitting the Tokyo metropolitan area, of which 40% will be due to fire and 60% due to building collapse.

Lives lost in earthquake

Tokyo DMAT (Disaster Medical Assistance Team) is celebrating its 20th anniversary this year. With a track record of more than 400 activities per year, it is expected to be active in a variety of disasters, including earthquakes. When we analyze the lives lost in past major earthquakes, we can divide them into four categories. (1) Direct death immediately after the disaster (instant death), (2) Death before rescue or relief intervention, (3) Death at hospitals where victims were taken, and (4) Death at evacuation centers or while living in other evacuation facilities. Of these, where effective medical interventions are expected is in the second category above, deaths that could have been prevented if rescued or relief intervention with immediate on-site treatments were taken (preventable deaths). In the case of the Great Hanshin-Awaji Earthquake, it is estimated that there were approximately 500 people in this category. However, most of the fatalities were direct deaths (instant deaths) with no room for rescue or relief intervention, 85.7% in the same earthquake and 82.3% in the Great East Japan Earthquake.

Preventing direct death

The most effective way to reduce the number of deaths caused by earthquakes is to avoid direct deaths. The basic strategy relies on architecture and urban engineering, such as making houses earthquake-resistant and rezoning densely wooded areas. Through this policy, the Tokyo metropolitan government hopes to halve the number by 2030 of deaths caused by earthquakes directly hitting the capital. This strategy also applies to disasters such as heavy rains and river flooding, and can be said to be the essence of urban resilience.

Security crisis facing Tokyo

On the other hand, the government's “National Security Strategy” shows that Japan is facing the most severe and complex security environment after the post-war era, and the capital Tokyo is in the midst of this threat. Although I do not deny that preventing terrorism or other major incidents is the key to national security,

we cannot prevent all possible incidents from occurring.

A new security perspective is needed

As a result of the revolutionary changes in modern military technology brought about by the advent of “Asymmetric weapons,” even when an incident occurs, questions such as “who attacked,” “what was the purpose,” or “what was utilized” won’t be answered clearly. For example, with biological weapons, it is extremely difficult to distinguish between a natural infection outbreak and bioterrorism. The risk that Tokyo residents will be suddenly exposed to threats without prior notice is increasing day by day.

Making Tokyo a base for medical security

There is an urgent need to develop a medical security system that provides concrete strategies from the perspective of “ensuring the life and physical safety of Tokyo residents” in special cases such as terrorism and bomb blasts. This will require a paradigm shift in the traditional emergency and disaster medical care system that includes the participation of Tokyo residents. There are many issues to be solved, such as the introduction of advanced medical knowledge and technology not previously available in Japan, the strengthening of information (intelligence) functions, and establishing a professional organization for policy support. Ensuring the protection of the lives of Tokyo residents in the face of terrorism is a new requirement for urban resilience, and will give a new perspective to national security.

“Translated by the secretariat”