Radiation effects on late-life neurocognitive function[1] in childhood atomic bomb survivors: A Radiation Effects Research Foundation Adult Health Study[2]

Based on the Adult Health Study (AHS), one of RERF's major research programs, RERF scientists recently studied radiation effects on late-life neurocognitive function in atomic bomb survivors exposed to low- or medium-dose radiation in childhood, an understudied topic to this point.

The study results indicated that older age was associated with the decline of late-life neurocognitive function in such A-bomb survivors. However, an association between radiation exposure and late-life neurocognitive function could not be convincingly demonstrated. Further research in the future is needed to evaluate the effects of radiation exposure during childhood on long-term neurocognitive function.

Notes

[1] Neurocognitive function:
Refers to the ability to think and reason based on communication created by electrical impulses that travel along nerve pathways in the brain. This study examined the areas of intellectual capacity, behavior, and emotion such as memory, awareness (place and time), calculation, language, and judgment.

[2] Adult Health Study (AHS):
A clinical research program based on biennial health examinations with the objective of investigating long-term health effects, such as disease incidence, of A-bomb radiation. This study of about 21,000 participants has been conducted since 1958.

doi.org/10.1667/RADE-21-00122.1
(Doi are permanent, content-specific numbers assigned to most digital information and, in this case, can be used to link to published abstracts and/or full papers.)

RERF's objective with this brief outline is to succinctly explain our research for the lay public. Much of the technical content of the original paper has been omitted. For further details about the study, please refer to the full paper published by the journal.