

Name: Khalil Iktilat

Date: 25.10.2025

ID: 062542774

PART A: CURRICULUM VITAE

1. Personal Details

Cellular Phone:	0507555710
E-mail Address:	ikt.khalil@gmail.com
Address:	P.O. Box 776, Dabburiya, Zip code: 1691000 – Aljore street – 3

2. Summary of my Scientific and Other Contributions and Future Plans

a. Contributions to Science:

Contribution 1: Environmental and Social Determinants of Aging

My research examines how environmental and social stressors, particularly community violence, socioeconomic inequality, and neighborhood context, affect biological and cognitive aging

My doctoral study at the University of Haifa involved a large-scale cohort of 420 middle-aged Arab adults and integrated biological (blood, saliva, microbiota), cognitive, and physical measures. Findings demonstrated that chronic exposure to violence and deprivation accelerates biological aging and increases psychological distress, contributing to a multidimensional understanding of social determinants of health.

Key publications:

1. **Iktilat, K.,** Isacson, M., Tzemah-Shahar, R., & Agmon, M. (2024). The link between exposure to violence and psychological distress among middle-aged Muslims in Israel: the role of gender. *Frontiers in Public Health*, 12, 1382053. <https://doi.org/10.3389/fpubh.2024.1382053> [IF=3.4, 5-yr IF=3.8, Rank=79/421 in Public, environmental & occupational health (Q1)]

Contribution 2: Biological and Behavioral Mechanisms Linking Stress and Health

This line of research identifies pathways through which psychosocial stress translates into functional decline. Using biomarker assays, cognitive testing, and microbiota profiling, I demonstrated that inflammation and gut microbial composition mediate the association between environmental stress and mental health. This interdisciplinary

approach bridges gerontology, behavioral science, and biomedicine.

Key publications:

1. **Iktilat, K.,** Levin, G., Isacson, M., Turjeman, S., Tzemah-Shahar, R., Louzoun, Y., Koren, O., & Agmon, M. (2025). Integrating Gut Microbiota and Violence Exposure Metrics to Classify Psychological Distress in Middle-Aged Adults. **Currently preparing a manuscript for publication in the journal *Communications Medicine* [IF=6.3, 5-yr IF=6.4, Rank=26/195 in Medicine, research & experimental (Q1)] .

Contribution 3: Frailty, Robustness, and Resilience Across the Lifespan

Using longitudinal data from the SHARE cohort, I identified modifiable factors—physical activity, cognitive engagement, and financial security—that predict sustained robustness and delay frailty. These findings promote a shift from deficit-based models of aging to frameworks emphasizing resilience and functional capacity.

Key publications:

1. **Iktilat, K., Rand, D., Bentur, N., & Tur-Sinai, A.** (2025). *Protective factors for sustaining robustness in older adults: Longitudinal evidence from European countries* [Manuscript submitted for publication]
2. Tzemah-Shahar, R., Hochner, H., **Iktilat, K.,** & Agmon, M. (2022). What can we learn from physical capacity about biological age? A systematic review. *Ageing Research Reviews*, 77, 101609. DOI: <https://doi.org/10.1016/j.arr.2022.101609> [IF=12.4, 5-yr IF=14.9, Rank=3/73 in Geriatrics & gerontology (Q1)]

Contribution 4: Innovative Approaches to Healthy Aging and Neurocognitive Health

My postdoctoral research integrates digital health, neuroscience, and nursing to explore non-pharmacological interventions for cognitive aging. I lead a multi-institutional project on olfactory stimulation during deep sleep and its effects on sleep quality, cognition, and gait, in collaboration with Haifa University, the Technion, the Hebrew University, and the neurotechnology company KIMBA.

Key publications:

1. **Iktilat, K.,** Isaacson, M., Tzemah-Shahar, R., & Agmon, M. (2025). Physical capacity is associated with attention but not with general executive function in middle aged adults. *PLoS One*, 20(5), e0321450. <https://doi.org/10.1371/journal.pone.0321450> [IF=2.6, 5-yr IF=3.2, Rank=44/136 in Multidisciplinary Sciences (Q2)]

b. Contribution to Society:

Throughout my career, I have advanced social equity in nursing education and healthcare. I have trained thousands of nurses nationwide and played a pivotal role in integrating underrepresented groups into the profession, including new immigrants, Bedouin nurses in southern Israel, and 40 nurses from Jisr al-Zarqa. My community engagement reflects a long-

term commitment to reducing health and educational disparities through academic empowerment and culturally adapted professional training.

c. Plans for future research programs (my academic vision):

My future research will continue bridging **nursing science, gerontology, and public health** to promote **equitable and healthy aging**.

I plan to:

1. Establish a longitudinal cohort in Arab and mixed communities in northern Israel to study environmental, psychosocial, and biological predictors of healthy aging.
2. Investigate structural mechanisms of health disparities, integrating quantitative registry data with qualitative, community-based research to inform policy interventions.
3. Advance biological-behavioral models of resilience, combining biomarkers, digital health data, and machine learning to predict frailty and cognitive decline.
4. Develop a Healthy Aging and Environment Lab for interdisciplinary research and student training in population-based nursing science. This integrated agenda seeks to generate actionable knowledge for designing culturally sensitive, data-driven interventions that strengthen resilience, reduce inequality, and extend health span in diverse aging populations.

3. Higher Education

a. Undergraduate and Graduate Studies

Period of Study	Name of Institution and Department	Degree
2001-2005	Nursing, Tel Aviv University+ Sheba nursing school	BA+ Registered nurse
2005-2008	Nursing, Tel Aviv University	MA
2019-2024	Gerontology, Haifa University	PhD

b. Post-Doctoral Studies

Period of Study (month/year – month/year)	Name of Institution and Department/Lab	Name of Host
1/2025- Present	Occupational therapy department, Tel Aviv University	Prof. Debbie Rand

4. Academic Ranks and Tenure in Institutes of Higher Education

Period (month/year – month/year)	Name of Institution and Department	Rank/Position Specify if full or percent part time
01/2025- present	Tel Aviv University, Department of Occupational Therapy	Postdoctoral Research Fellow (full time)

5. Scholarly Positions and Activities outside the University

Year	Memberships in Academic Professional Associations
2023-Present	Gerontological Society of America (GSA)
2019-Present	Israeli Gerontological Society

6. Conferences / Invited Lectures / Seminars (last 10 years or more)

a. Participation in International Conferences

Date (month/year)	Name of Conference	Place of Conference (city and country or indicate if a virtual conference)	Subject of Lecture/Discussion	Role
2005	The International Nurses Conference	Taipei, Taiwan	Nursing and Health System in Israel — (The Israeli Delegate)	Speaker
2007	The International Nurses Conference	Yokohama, Japan	Nursing and Health System in Israel — (The Israeli Delegate)	Speaker

2008	International Congress on Nursing Education Research & Practice	Thessaloniki, Greece	Knowledge, health beliefs and preventive behavior for osteoporosis among nurses and nursing students in Israel	Speaker
2023	Gerontology society of America	Tampa, Florida	The Link Between Violence Exposure and Biological Aging in Mid-Life Muslims in Israel	Symposium
2024	27th Congress of the European Sleep Research Society.	Sevilla, Spain	The link between biological age and sleep in a middle-aged Muslim women cohort.	Poster presenter
2024	Gerontology society of America	Seattle	The role of gender in the relationship between violence exposure and psychological distress in middle age	Poster presenter
2024	Gerontology society of America	Seattle	Physical capacity is associated with attention but not with general executive function in middle aged adults	Speaker
2025 Upcoming	Gerontology society of America	Boston	Frailty Development in Older Adults: Insights from an Eight-Year Longitudinal Study	Poster presenter
2025 Upcoming	Gerontology society of America	Boston	Integrating Gut Microbiota and Violence Exposure Metrics to Classify Psychological Distress in Middle-Aged Adults	Speaker
2025 Upcoming	Gerontology society of America	Boston	Biological Age and Psychological Distress: Health Disparities Between Midlife Jewish and Arab Adults	Speaker / Symposium

b. Participation in Local Conferences

Date (month/year)	Name of Conference	Place of Conference (city)	Subject of Lecture/Discussion	Role
2005	The International Cardiology and Intensive Care Conference	Tel Aviv	Hyperlipidemia Updates and New Data —	Speaker
2008	the International Nursing Research Conference	Jerusalem	Knowledge, health beliefs and preventive behavior for osteoporosis among nurses and nursing students in Israel,	Poster presenter

7. Research Grants

a. Grants Awarded

Years	Role in Research (PI, Co-PI, CI)	Other Researchers (Name & Role)	Title	Funded by	Amount	Relevant Publications
2025	Co- PI	Prof. Debbie Rand + Prof. Aviad Tur-Sinai	Deciphering the Impact of APOE4 on the Aging Brain: A Multinational Comparative Study on Its Association with Alzheimer's Disease	Ramat Gan Alzheimer's Center	20,000 NIS	

8. Teaching

a. Courses Taught (last 10 years)

Years	Name of Course	Type of Course Lecture/Seminar/ Workshop/ Online Course/ Introduction Course (Mandatory)	Level BA/BSc/MA/MSc/ PhD/ etc
2005- Present	Preparation for the National Nursing Licensure Examination	Lecture	BA
2005-2020	Cardiology, respiratory diseases, gastroenterology, surgery, endocrinology, nephrology, urology, hematology, oncology, neurology, neurosurgery, orthopedic disorders.	Lecture	BA
2005-2019	Trauma and Emergency Medicine	Lecture	BA
2005-2019	Anatomy and Physiology	Lecture	BA
2005- Present	Clinical Pharmacology	Lecture	BA

PART B: PUBLICATIONS

H-index:	3	Source: Google Scholar
Citation index:	37	Source: Google Scholar
ORCID number:	0000-0002-3180-5421	
Google Scholar link:	https://scholar.google.com/citations?hl=iw&user=vCdePRoAAAAJ	

A. Ph.D. Dissertation

Title:	The relationships between the environment and aging process among middle-aged Muslims in Israel.
Date of submission:	November 2024
Number of pages:	127
Language:	English
Name of supervisor:	Maayan Agmon, PT, PhD & Michal Isacson, PhD.
University:	Haifa

B. Articles in Refereed Journals

1. **Iktilat, K.**, Isacson, M., Tzemah-Shahar, R., & Agmon, M. (2024). The link between exposure to violence and psychological distress among middle-aged Muslims in Israel: the role of gender. *Frontiers in Public Health*, 12, 1382053. <https://doi.org/10.3389/fpubh.2024.1382053> [IF=3.4, 5-yr IF=3.8, Rank=79/421 in Public, environmental & occupational health (Q1)]
2. Massalha, A. E. M., & **Iktilat, K.** (2024). The Relative Contribution of Academic Passion to Academic Well-Being Among Nursing Students. *European Journal of Education Studies*, 11(11). <http://dx.doi.org/10.46827/ejes.v11i11.5600> [Not listed in JCR – no official IF]
3. Ahmed-Yousef, N. S., Dilian, O., **Iktilat, K.**, & Agmon, M. (2023). CRP, but not fibrinogen, is associated with gait speed as early as middle age, in females but not males. *Scientific Reports*, 13 (1), 15571. <https://doi.org/10.1038/s41598-023-42183-1> [IF=3.9, 5-yr IF=4.3, Rank=25/136 in Multidisciplinary Sciences (Q1)]
4. Tzemah-Shahar, R., Hochner, H., **Iktilat, K.**, & Agmon, M. (2022). What can we learn from physical capacity about biological age? A systematic review. *Ageing Research Reviews*, 77, 101609. DOI: <https://doi.org/10.1016/j.arr.2022.101609> [IF=12.4, 5-yr IF=14.9, Rank=3/73 in Geriatrics & gerontology (Q1)]

5. **Iktilat, K.**, Isaacson, M., Tzemah-Shahar, R., & Agmon, M. (2025). Physical capacity is associated with attention but not with general executive function in middle aged adults. *PLoS One*, 20(5), e0321450. <https://doi.org/10.1371/journal.pone.0321450> [IF=2.6, 5-yr IF=3.2, Rank=44/136 in Multidisciplinary Sciences (Q2)]

2. Other Works and Publications

Author of more than 20 textbooks in the field of clinical nursing, including: Clinical Pharmacology, Adult Nursing, Psychiatry, Law and Ethics, Pharmaceutical Calculations, Intensive Care, Geriatrics, Clinical Instruction, Maternity and Gynecology, and Pediatric Nursing.

3. Submitted for Publication

Iktilat, K., Tur-Sinai, A., Bentur, N & ,Rand, D .(2025) .Protective factors for sustaining robustness in older adults: Longitudinal evidence from European countries(Manuscript submitted for publication)

4. Publications in Preparation

Iktilat, K., Levin, G., Isacson, M., Turjeman, S., Tzemah-Shahar, R., Louzoun, Y., Koren, O., & Agmon, M. (2025). Integrating Gut Microbiota and Violence Exposure Metrics to Classify Psychological Distress in Middle-Aged Adults. **Currently preparing a manuscript for publication in the journal Communications Medicine [IF=6.3, 5-yr IF=6.4, Rank=26/195 in Medicine, research & experimental (Q1)] .