Maram Khazen

Date: 30.5.2023

CURRICULUM VITAE

1. Personal Details

Permanent Home Address: Dror 8, Akko Home Telephone Number: 049810280 Cellular Phone: 0547940090 Electronic address:maramk@yvc.ac.il

2. Higher Education

. Onuci gi auuat	Undergraduate and Graduate Studies					
Period of	Name of Institution	Degree	Year of Approval of			
Study	and Department		Degree			
2014-2019	University of Tel-	PhD	2019			
	Aviv, Department of					
	Communication.					
	Professor Nurit					
	Guttman					
	University of Haifa,	Master of Arts	2009			
2006-2009	Department of					
	Communication					
1996-1999	Hebrew University	B.Sc.Pharmacy	2000			
	of Jerusalem, School					
	of Pharmacy					

A. Undergraduate and Graduate Studies

B. Post-Doctoral Studies

Period of	Name of Institution,	Degree	Year of	Supervisor
Study	Department and		Completion	
	Host			
2022-present	University of	Post-doctorate	2023	Professor
	Jerusalem. School of	studies		Adam
	Public Health			Rose
2021-2022	University of Haifa.	Post-doctorate	2021	Professor
	School of Public	Studies		Orna
	Health			Baron-Epel
2019-2021	Harvard Medical	Post-	2021	Professor
	School, Center of	Doctorate		Gordon
	Patient Safety	Studies		Schiff
	Research & Practice			

and Brigham &		
Women Hospital		

3. Academic Ranks and Tenure in Institutes of Higher Education

Dates	Name of Institution and Department	
		Rank/Position
2022-present	Department of Health Systems Management. The Max Stern Yezreel Valley College	Lecturer – tenure track
2021	School of Nursing. Tzfat College	Lecturer
2020-2021	Harvard Medical School	Teaching fellow (part of Post doctorate studies, supervisor Gordon Schiff
2015-2017	Communication Department. University of Tel-Aviv	Research Assistant
1998- 1999	School of Pharmacy, Hebrew University of Jerusalem	Research Assistant

4. <u>Scholarly Positions and Activities outside the Institution</u> Membership in professional/scientific societies

Primary-Care Research in Diagnosis Errors (Prides) & Betsy Lehman Center Learning Network (2019- current) National Communication Association (2018- current) International Communication Association. (2018- current)

Professional Service

Academic Committees

- Aubrey Fisher Mentorship Award Committee member, Health Division, International Communication Association. (2019-2022)
- Treasury Committee Member, Health Communication division, International Communication Association. (2019-2020)

Conference reviewer

- Conference reviewer, American Public Health Association 2023 Annual Meeting and Expo, Atlanta, 2023.
- Conference reviewer, Health Communication Division, 73th Annual ICA Conference. Toronto, Canada, 2023.

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- Conference reviewer, Health Communication Division, 71th Annual ICA Conference. USA, 2021.
- Conference reviewer, Health Communication Division, 106th Annual NCA Convention. USA, 2020.
- Conference reviewer, International Conference on Communication in Healthcare, ICCH, San Diego, USA, 2019.
- Conference reviewer, Health Communication Division, 69th Annual ICA Conference. Washington, DC, USA, 2019.
- Conference reviewer, Health Communication Division, 105th Annual NCA Convention. Baltimore, Maryland, USA, 2019.

Professional Service

Organizing medication consultations at the Ophthalmology and Gynecology units at the Galilee Medical Center hospital, Israel, 2000.

5. Participation in Scholarly Conferences

Date	Name of	Place of	Subject of	Role
	Conference	Conference	Lecture/Discussion	
November	November American Public		Factors contributing to	Presenter
2023	Health	USA	more regular care in	
	Association 2023		primary care settings, and	
	Annual Meeting		associations with health	
	and Expo		outcomes: Mixed	
			methods study	
May 2022	The 72 th Annual	Paris,	Anatomy of Diagnosis in	Presenter
	International	France	a Clinical Encounter:	
	Communication		How Clinicians Discuss	
	Association		Uncertainty with Patients	
	Conference			
October	Society to	Virtual	The quest for a high-	Presenter
2021	Improve		quality diagnosis:	
	Diagnosis in		measuring and comparing	
	Medicine (SDIM)		acute clinical encounters	
	Conference		and clinical	
			documentation.	
May 2021	The 71th Annual	Virtual	Acknowledging and	Presenter
	International		communicating	
	Communication		diagnostic uncertainty:	

a. Active Participation

	Conference	Conference	Lecture/Discussion	
Date	Name of	Place of	Subject of	Role
November 2018	Communication Association 104th Annual Convention: Communication at Play	Salt Lake City, Utah, USA	Self-Initiated Use of Antibiotics in the Arab Society in Israel: Sociocultural, Normative, and Institutional Conditions According to the Conceptions of Community Members, Pharmacists, and Physicians	Presenter
May 2019	International Communication Association Conference	Washington, DC, USA	Normative Expectations and the Relationship Between Pharmacists and Customers in A Minority Community: The Complex Case of Antibiotics	Presenter
November 2019	The National Communication Association 105th Annual Convention	Baltimore, MD, USA	Debunking the Legacy of Controversial Veiling Practices: Freedom of Choice-Making Matters for Survival"	Panel participant
November 2019	Communication Association 105th Annual Convention	Baltimore, MD, USA	Respect, Expertise, and Embarrassment: Gender- Related Reasons for Self- Medication with a Prescription Drug in the Traditional Arab Society in Israel	Presenter
May 2020	Society of General Internal Medicine (SGIM) Conference	Virtual	structured tool implemented during clinical encounters Communicating Diagnostic Uncertainty in Primary Care: Development of 7- Element Tool Operationalized by Voice Enabled Integration into Clinical workflow	Presenter
	Association Conference		developing and testing a patient leaflet and a	

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May	The 15th annual	Tel Aviv	A Mixed Methods Study	Poster
2023	conference on health		Regarding Factors	presenter
2023	policy		Contributing to more	presenter
	poncy		Regular Care of Chronic	
			Patients from the	
			Perspective of the	
			Healthcare Staff in	
Dehmann	Israeli Center for	Ben Gurion	Primary Care Settings	Invited
February 2022			Ethics in Qualitative research	
2022	Qualitative Research	University	research	lecturer
	of People and			
June	Societies The 4 th Public	Kfar	Factors for Self-	Poster
		Maccabiah	medication in the Arab	
2018	Health Conference			Presenter
		Convention	society in Israel	
		Center,	according to the	
		Ramat Gan,	perspectives of	
		Israel	Pharmacists, Physicians,	
M	The 12th annual	T-1 A	and Community members	Duccenter
May	The 13th annual	Tel Aviv,	Self-medication in the	Presenter
2018	conference on health	Israel	Arab Society in Israel:	
	policy		Conceptions of	
			Community Members,	
			Pharmacists, and	
			Physicians regarding	
			Sociocultural, Normative,	
			and Economic Conditions	D
March	The 8th Israeli	Ben Gurion	My Wife is a Half	Presenter
2018	Interdisciplinary	University,	Doctor" and "My	
	Conference of	Israel	Pharmacist is a Friend":	
	Qualitative Research		Challenges in Studying	
			the Sociocultural Context	
			of Self-Medication with	
			Antibiotics in the Arab	
			Society in Israel	

6. Invited Lectures\ Colloquium Talks

Date	Place of Lecture	Name of Forum	Presentation/Comments
April,	School of public Health. Ben	Faculty Seminar	From the Pharmacy
2022	Gurion University		Setting to Studying
			Culture and
			Communication in
			Diverse Healthcare
			Contexts

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March, 2022	Braun School of public Health. Hebrew University- Hadassah, Jerusalem	Faculty Seminar	Culture and Communication in Diverse Healthcare Contexts
March, 2021	Department of communication, Tel Aviv University	Department Seminar	

8. <u>Research Grants</u>

c. <u>Submission of Research Proposals – Not Funded</u>

Role in	Co-Researchers	Торіс	Funded by	Year
Research				
Co-PI	Nurit Guttman	What can	Israel	2023
		encourage the use	National	
		of tele-medicine	Institute for	
		among members of	Health	
		the Arab society in	Policy	
		Israel and what are	Research	
		the barriers and		
		concerns from their		
		perspective		

d. Scholarships, Awards and Prizes

- The Israeli Council of Higher Education: \$ 30000 Post-doctoral fellowship (2020-2021)
- The Israeli Council of Higher Education: \$ 20000 Post-doctoral fellowship (2019-2020)
- Communication Department \$1000 conference travel grant- Tel Aviv University (2019)
- Scholarly Activities Committee: \$8000 for development of PhD studies- Tel Aviv University (2014)

e. <u>Teaching</u>

	a. <u>Courses l'augnt in Recent Years</u>				
Year	Name of Course	Type of Course	Degree	Number of	
		Lecture/Seminar/		Students	
		Workshop/High Learn Course/			
		Introduction Course (Mandatory)			
2023	Innovations in	Lecture	Undergradu	67	
	healthcare settings		ate students		
2022	Patient experience	Lecture	Undergradu	57	
	and health		ate students		

<u>Courses Taught in Recent Years</u>

	communication aspects			
2022/2 023	Qualitative Seminar: the complexity of patient-healthcare provider relationships	Seminar	Undergradu ate students	22
2022	Health communication aspects: Culture, traditions, and the patient-healthcare provider models	Lecture		56
2021	Nursing and healthcare services in the digital era	Lecture	Undergradu ate students	10
2020	Special and emerging topics in patient safety and quality of care	Seminar at Harvard Medical School	Clinicians	5

11. Miscellaneous

During my Master's degree I was on a one year maternity leave. Also, during my PhD studies, I took a year off to raise my twins.

12. Professional Experience

Community pharmacist. (2000- present)

PUBLICATIONS

A. Ph.D. Dissertation

Dissertation: "Self-Initiated Use of Antibiotics in the Arab Minority Society in Israel: Sociocultural, Normative, and Institutional Conditions According to the Conceptions of Community Members, Pharmacists, and Physicians." Advisor professor Nurit Guttman. University of Tel-Aviv, Department of Communication. (2019, written in English, p.312)

B. Scientific Books (Refereed)

A. Chapter in Scientific Books – Published

1. Guttman, N, Lev, E, & **Khazen**, **M**. Ethical issues in health communication in clinical and digital settings and in health communication campaigns. In Thompson & N. G. Harrington. (Eds.) (2021). *Routledge Handbook of Health Communication* (3rd ed.). London, UK: Routledge. (p.507-521).

D. Articles in Refereed Journals

Published

Note: For joint publications, the order of the listed authors and the way they appear is according to their relative contribution.

- Khazen, M, Abu-Ahmad, W, Spolter, F, Golan-Cohen, A, Merzon, E, Israel, A, Vinker, Sh, Rose, A. (2023). More Temporally Regular Primary Care Visits Is Associated with Reduced Hospitalizations and Mortality, Even After Controlling for Continuity of Care. *Journal of BMC Health Service Research*. (second round review, minor revisions) p. 1-20. (Q1, Medicine)
- Rose AJ, Abu Ahmad W, Spolter F, Khazen M, Golan-Cohen A, Vinker S, Green I, Israel A, Merzon E. (2023). Patient-level predictors of temporal regularity of primary care visits. *BMC Health Services Research*. 2023;23:456. https://doi.org/10.1186/s12913-023-09486-5 (Q1, Medicine)
- Khazen, M., Sullivan, E., Ramos, J., Mirica, M, Olson, A, Linzer, M, Schiff, G. (2023). How does work environment relate to diagnostic quality? A prospective, mixed methods study in primary care. *British Medical Journal Open*. 13(5). P.1-11. (Q1, Medicine)
- 4. **Khazen, M**., Mirica, M., Groissier, A., Carlile, N., & Schiff, G. (2023). Managing Diagnostic Uncertainty in Primary Care: Development of Patient Guidelines and After Visit Summary. *JAMA Network Open*. 6(3), e232218-e232218. (Q1, Medicine)
- Mirica, M, Khazen, M, Hussain, S, Ramos, J, Eguale, T, Linzer, M & Schiff, GS. (2023). Assessing the assessment – Developing and deploying a novel tool for evaluating clinical notes' diagnostic assessment quality. *Journal of General Internal Medicine*. p.1-10 (Q1, Medicine)
- Pikkel Geva HZ, Gershgoren H, Nir D, Khazen M, Rose AJ. (2023). Vaccine Hesitancy Among Health Care Workers in the era of COVID-19. *Health Education Research*. https://doi.org/10.1093/her/cyad003 (Q2, Medicine- public health)
- Sullivan, E., Khazen, M., Ramos, J., Mirica, M, Olson, A, Linzer, M, Schiff, G. (2023). Understanding relationships between physicians' burnout and diagnostic reasoning. *Diagnosis*. P.1-4. (Q1, Medicine)
- Salazar, A, Amato, MG, Shah, S, Khazen, M, Aminmozaffari, S, Klinger, E, Volk, A, Mirica, M, Wright A, Schiff, G. (2023). Pharmacists' Role in Detection of Adverse Drug Reactions: Developing Proactive systems for Pharmaco-surveillance. *American Journal of Health-System Pharmacy*. 1-8 (Q2, Pharmacy)
- 9. **Khazen, M** & Guttman, N. (2023). Pharmacists under pressure to concede: Why pharmacists provide non-prescribed antibiotics in a collectivist society. *Social Science & Medicine Qualitative Research in Health.* 1-8. (Q1, Social Science)
- Linzer, M., Sullivan, E.E., Olson, A.P., Khazen, M., Mirica, M., & Schiff, G. D. (2023). Improving diagnosis: adding context to cognition. *Diagnosis*. 10(1) 1-5. (Q1, Medicine)
- 11. **Khazen, M**., Sullivan, E., Mirica, M, Olson, A, Linzer, M, Schiff, G. (2022). Anatomy of Diagnosis in a Clinical Encounter: How Clinicians Discuss Uncertainty with Patients. *Journal of BMC Family Practice*. 23(1), 1-9 (Q1, Medicine)

- 12. **Khazen, M**. (2022). Power dynamics in doctor-patient relationships: A qualitative study examining how cultural and personal relationships facilitate medication requests in a minority with collectivist attributes. *Patient Education & Counseling*. 105(7), 2038-2044. (Q1, Medicine)
- Khazen, M., & Guttman, N. (2021). ""Nesef Doctora"- when mothers are considered to be 'half-doctors': self-medication with antibiotics and gender roles in Arab society in Israel. *Sociology of Health & Illness*. 43(2), 408-423.https://doi.org/10.1111/1467-9566.13229. (Q1, Social Science)
- Khazen, M & Schiff, G. (2020). Feedback on Missed and Delayed Diagnosis: Differential Diagnosis of Communication Dilemmas. *The Joint Commission Journal on Quality and Patient Safety*. 47(2),71-73. (Q2, Medicine)

K. Submitted Publications

- 1. **Khazen, M** & Baron-Epel, O. A mixed methods approach to examine promotion of Covid-19 vaccinations by pharmacists belonging to a minority: Israel as a case study. *Research in Social and Administrative Pharmacy.* P. 1-18 (Q1, Pharmacy)
- Bruch J, Khazen M; Mahmic-Kaknjo M, Légaré F, Ellen M. Shared Decision Making in the Clinical Setting: An Umbrella Review. *Value in Health*. 1-20 (Q1, Medicine-Health Policy)
- Guttman, N., Lev., E., Khazen, M., Hadar, S., Mizrachi, N. Overcoming the knowledge gap in realizing healthcare services rights: A study of 'Positive Deviance' among Ethiopian immigrants compared to non-immigrants. *Journal of Health Communication*. (Q1, Health Communication)

L. Summary of my Activities and Future Plans

My general research interest focuses on communication and relations in healthcare in the broad sense, spanning from the patient-provider relationships to social marketing and communication interventions, with a particular concern for issues associated with equity and culture. In my research I draw on my own professional background as a practicing community pharmacist in the Arab community in Israel. For example, as a female practicing pharmacist I encountered requests for non-prescribed antibiotics by unmarried Arab women, which led me to one of the topics associated with gender and culture that was elaborated in my study on requests for non-prescribed antibiotics in the Arab society. During the Covid-19 pandemic, I was approached as a healthcare professional working within a community setting for advice and consultation, and this led to my study on the role of pharmacists and the role of Arab women as healthcare takers during the pandemic. My training as a communication researcher with quantitative and qualitative skills enables me to develop a multi-faceted research agenda that combines questions that specifically relate to communication in the healthcare context. For example, communication that takes place between patients and clinicians and its implications on quality of care and patient safety or questions that relate to limited access or health literacy and healthcare inequities.

Particularly my research has been focused on four areas. The first is practitionerpatient communication and its implications for trust in practitioners and patient empowerment. One of my studies (in collaboration with Prof Nurit Guttman) suggested that certain aspects of practitioner-patient communication is unique to collectivist cultures. These unique attributes (e.g., the centrality of social ties and personal commitment in pharmacistcustomer relationships) can be harnessed to improve medication uses. Another study in collaboration with Prof. Orna Baron-Epel, focuses on the role of Arab pharmacists as trusted figures during the Covid-19 pandemic. Its findings suggest that pharmacists played an important role in communicating Covid-19 health related messages to members of the Arab community, including promoting vaccinations during the pandemic. The pharmacists were attentive to community members' inquiries and concerns about the novel vaccines and set a personal example by being vaccinated themselves.

A second area of interest is gender and culture in healthcare in traditional cultures and minorities as they relate to health among community members. In my studies, Arab women were viewed by themselves and others within the community as a health caretaker. The findings of my study suggest that on the one hand, this role facilitates acts of self-medication and the consumption of non-prescribed prescription medications. On the other hand, it can be enlisted to promote pro-health practices. Unfortunately, the significance of this role was only realized in the later stage of the pandemic in the communication approaches developed by the Ministry of Health and local authorities to address the pandemic in the Arab society in Israel. I studied Arab women's conceptions of the information disseminated in the Arab community by the authorities regarding Covid-19 and the role of Arab women as "influencers" in maintaining and promoting the health of those in their social surroundings during the pandemic. This work combined my interest in cultural aspects and patient engagement in health issues. My findings (manuscript in preparation) point to communicational skills that Arab women applied to navigate between social obligations and coping with COVID19 policies. They preserved the health of their family by adapting the informal social rules of their surroundings to the health regulations.

A third research area of interest relates to practitioners' perspectives and the role of communication and teamwork in healthcare settings. This area also concerns communicating diagnosis to patients and its implication for patient safety and for quality of care. My clinical background as a pharmacist enabled me to work in studies on quality of diagnosis aspects during my postdoctoral position at Harvard Medical School supervised by Prof. Gordon Schiff. As our research interests overlapped, we continued our collaboration on two main projects. The first, a project that focuses on diagnostic errors and clinicians' burnout and stress, particularly in primary care. In the context of studies regarding patients' perspectives, I am also serving on the advisory board on a two-year project that was recently funded by the Agency for Healthcare Research and Quality (AHRQ) titled "Improving Cancer Diagnosis (ICDx): Learning from Patients Experiencing Cancer Diagnosis Delays". A related study, conducted at the School of Public Health, Jerusalem, supervised by Prof. Adam Rose, focuses

on examining how the regularity of care of chronic patients might be influenced by teamwork and dynamics between healthcare professionals at the clinic level. This work combines my interest in patient-healthcare provider communication and quality of care. Having conducted interviews with healthcare professionals, we are currently analyzing the data and I am preparing a manuscript titled "More Temporally Regular Primary Care Visits Is Associated with Reduced Hospitalizations and Mortality, Even After Controlling for Continuity of Care".

A fourth research area relates to inequities in healthcare and management of illness. I was part of a research team studying barriers that could prevent members of different groups to realize healthcare services rights. This project conjured with my interest in patient empowerment and interactions in healthcare. We interviewed individuals from the public, individuals from the Arab society, and Ethiopian immigrants. More than half of the participants did not realize their healthcare rights, and the study aimed to learn about barriers preventing realizing health rights and what facilitated realizing the rights for those who succeeded. I oversaw the interviews of the Arab participants. The findings indicate that not only is knowledge of the rights important, but cultural factors play an important role, including limited sense of self-efficacy. A manuscript is being prepared for submission. Further, this upcoming year I will be working as a co-researcher with Nurit Guttman and Rivka Neriya-Ben Shahar on a study supported by an ISF grant on how members of diverse cultural groups in Israel conceived appeals to positive values in order to encourage them to adopt the regulations and preventive measures. This study will also focus on marginalization among minority groups and how this could affect the adoption of pro-health practices.

I am also interested in developing and applying mixed-methods methodology. For example, as part of my research on pharmacists' role during the Covid-19 pandemic, one goal was to develop a display of qualitative and quantitative integration to further enhanced understanding why (factors enabling promoting vaccinations) and how (private initiatives) pharmacists encouraged covid-19 vaccinations during the pandemic. I plan to develop this approach in my future studies to enable a broader and comprehensive understanding when researching complex social phenomena in the context of health.

Across all areas of my research is my interest to advance understanding of how health behavior can be promoted in marginalized communities and how to promote excellence in healthcare, and training of healthcare professionals as it relates to transparent patientpractitioner communication, cultural aspects, and quality of care. These aspects are prominent in addressing health disparities and culture-centered strategies that can be harnessed to improve health outcomes and promote social change.

In my research I have maintained international collaborations and have been involved in international academic organizations. I presented in international conferences and have served as a member of several of the International Communication Association's committees, in particular the health communication division. This division supports an international community of scholars with strong commitment to effective mentoring and a collaborative culture which enabled me to connect with other health communication scholars. On the

community level, in the past seven years I have been giving lectures to elementary school students focusing on the importance of pharmaceutical drug safety.

My aims for future work are to merge between my interests in culture and communication aspects and health issues as it relates to examining barriers and incentives to adopting tele-health services in minority populations and traditional societies to reduce health disparities, while also exploring ethical and privacy concerns expressed by these populations. Further, related to my interest in quality of care and diagnosis quality, I am interested in studying whether adopting tele-health technologies in Israel has contributed on the one hand to clinician burnout and documentation workloads, and on the other impacted communicating diagnosis to patients and if that correlates with poorer diagnostic performance. I am also interested in continuing my international collaborations in examining how maintaining professional boundaries in the healthcare encounter might be accompanied by ethical challenges and repercussions in different cultures, and how communication between patients and their clinicians about diagnosis might differ according to the cultural context in terms of clinical information disclosed by the patient and the clinician.