

**July 2021**

**Issue 10**

# **The Cheryl Spencer Department of Nursing Newsletter**

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# Message from the Editor



I am thrilled to deliver this volume, which discusses, aside from the numerous excellent academic activities held in our department and the achievements of its faculty and students, a topic that is highly relevant within – and hopefully following – the COVID-19 era:

work–life balance (WLB). The global COVID-19 outbreak challenged the contexts in which we live and work, the meaning we attach to them, the boundaries between them, and their complex inter-relations. Within the nursing profession, as care became extremely stressful and demanding, nurses express concerns regarding the organizational and social support required to manage role conflicts. Recent studies show that the lack of an ethical climate and institutional support combined with a disrupted WLB constitutes a serious threat to nurses’ careers and overall satisfaction from their career choice. This is why discussion of the theory, practice, and application of WLB in routine but especially during extreme situations, such as pandemics, is of high significance.

This volume contains five articles discussing WLB. Drach-Zahavy and Goldblatt present important coping strategies discussed in the recent literature to enhance nurses’ growth during the COVID-19 crisis, especially in light of the family–work interface. Zisberg and colleagues discuss managerial roles and efforts in improving resilience and helping nurses balance the ongoing demands in response to the COVID-19 pandemic as they are reflected in a study conducted in two medical centers in Israel. Safiya and colleagues investigate the associations between quick returns, sleep quality, and work–family conflict among nurses with children in a cross-sectional study they conducted in three hospitals. Sperling highlights major findings from a survey conducted among nurses in Israel during the COVID-19 pandemic and the implications of such findings for the theory of WLB. Finally, Wilhelm shares how discussing and publishing personal stories of nursing students who were emotionally overwhelmed from their family pressure during COVID-19 was integrated in the curriculum and clinical practice.

Additionally, in this volume, we proudly present our recent PhD graduates, activities at the Cheryl Spencer Institute of Nursing Research, news updates, and recent faculty achievements.

I hope you enjoy this volume and find ways to strengthen your connections with our faculty and department in fruitful and prosperous collaborations.

Best wishes,

**Prof. Daniel Sperling, SJD, BA (Philosophy)**

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# Message from the Head of the Cheryl Spencer Department of Nursing

Dear friends, colleagues, and students,

The COVID-19 pandemic presents many new challenges to healthcare professionals worldwide. Nurses in particular constitute the largest segment of healthcare providers, and they are at the highest risk for the disease and its sequelae. Alongside their admirable and professional work with patients at the forefront of the pandemic, nurses are constantly faced with numerous obstacles including fear of being infected and/or infecting their loved ones, more hours at work due to staff shortages, and managing their young children who are studying from home due to repeated lockdowns.

Our annual newsletter focuses on **nurses' work-life balance (WLB)**, an often ignored and under-investigated concept that assumes many new facets in the COVID-19 era. Research showcased here re-assesses the theory of WLB, considers the fine line between organizational needs and personal risk, assesses coping strategies and resilience, and examines the effects of specific shift-work schedules on perceived WLB.

We are very proud to introduce our new PhD graduates. Prof. Efrat Dagan, the incoming Head of the Cheryl Spencer Institute for Nursing Research (CSINR), presents new and exciting projects, including our virtual conference held in early March: "Nursing in the Days of Corona: Evidence from Research and the Field."

Our aim is to support our students in continuing their higher education despite the many challenges they face, and we are greatly looking forward to a gradual transition from online home studies back to teaching and interacting with students on campus. We are proud of our 3rd- and 4th-year undergraduate students, many of whom are taking an active part in the administration of vaccines in the Israeli community healthcare system, as well as our graduate students who are on the front line in COVID-19 units in major hospitals throughout the country.

It is our hope that the field of nursing as a whole, here and around the world, will receive well-deserved recognition and appreciation for their courageous role during the pandemic.

With warm regards,

**Prof. Tamar Shochat, DSc**





# Between and Within: Nurses' Coping with the Work–Family Interface in the Era of COVID-19

By Anat Drach-Zahavy and Hadass Goldblatt



Work–family conflict (WFC) is a form of inter-role conflict where engagement in one role (e.g., family) becomes harder because of one's participation in the other role (e.g., work) (Greenhaus & Beutell, 1985). Such conflict is bidirectional: work interferes with family (WIF) and family interferes with work (FIW) (Spieler et al., 2018). However, scholars have also highlighted that some employees might view the two domains as enriching one another rather than as conflicting (i.e., work–family and family–work facilitation), thereby leading to positive outcomes in terms of job and family satisfaction and general well-being (Greenhaus & Powell, 2006).

The outbreak of the COVID-19 pandemic has shaken nurses' balance between the work and family domains. As for WIF, as work demands intensified in response to the COVID-19 pandemic, WIF conflict probably increased. The transition to 12-hour shifts has added to the conflict's time-based facet, while the requirement to perform clinical care for patients in conditions of inadequate resources has contributed to its stress-based aspect. Specifically, nurses may witness dying patients who cannot say goodbye to family members because of isolation regulations (Ford, 2020), experience moral distress owing to their or other staff members' reluctance to treat coronavirus patients (Greenberg et al., 2020; Morley et al., 2019; Sperling, 2020); or watch staff members being exposed, suffering infection, and even losing their lives following COVID-related care (Cook et al., 2020; Ford, 2020). Consequently, nurses' fear of becoming infected and moreover, of infecting their loved ones – might increase (Maben & Bridges, 2020). Together, these intensified demands can deplete nurses' resources (Chew et al., 2020; Ruiz-Fernández et al., 2020; Sun et al., 2020), making them less equipped to manage family demands. Concomitantly, the COVID-19 pandemic has also potentially increased FIW conflict. As citizens, whose personal lives have gone awry, nurses have to deal with the quarantines, loneliness, worry about children and older parents at home, and economic problems that plague the rest of the population (Aslan & Pekince, 2020). This situation might intensify family demands, affecting nurses' functioning also at work.

Referring to WIF and FIW, a hidden pre-assumption is an existing boundary between these two facets of life. Yet, another perspective that could shed light on the phenomenon is that of living under the shared reality of uncertainty (Dekel et al., 2016). Accordingly, nurses as citizens share with their patients their worries and risk for life, but also the fear of being infected by their patients or of infecting them. Thus, nurses experience solidarity with their patients and the rest of the population, while also potentially viewing their patients as a hazard.

Given these challenges, questions arise concerning the key factors that help nurses grow from the COVID-19 crisis, perceiving the two domains as enriching rather than conflicting. A recent study outside the nursing context (Vaziri et al., 2020) identified three effective coping strategies. First, integration rather than segmentation. Whereas some nurses create and maintain thick, non-permeable boundaries separating work and family (segmentation coping strategy; Clark, 2000), others integrate both roles by keeping role boundaries more permeable, sensing more control over work–family interaction (integration coping strategy; Kossek & Lautsch, 2012). Nurses typically believe that segregating work and family domains can help them ease WFC (Drach-Zahavy & Marzuq, 2013; Goldblatt, 2009). Yet, in line with Vaziri et al.'s (2020) findings, nurses characterized by lower segmentation coping strategies (i.e., integrators) might be more likely to benefit during COVID-19.



Second, engagement rather than disengagement-from-emotion coping strategies. Apparently, nurses believe that disengagement-from-emotion coping strategies, such as toughening up and emotional detachment, are well suited to safeguard themselves against emotional flood and are better strategies in coping with WFC (Goldblatt et al., 2008; Hart et al., 2014). Nurses note being reluctant to share their work experiences with their family members to protect the latter from strain and/or because they feel that family members deny/cannot understand their experiences (Goldblatt, 2009). By contrast, Vaziri et al. (2020) found that these strategies are less adequate and enhance the perception of work and family as conflicting with rather than as enriching each other.

Third, at the organizational level, employees whose leaders exhibited higher family-friendly support behaviors were less likely to view the COVID-19 situation as a threat to their ability to balance work and family domains (Vaziri et al., 2020). Accordingly, a positive, compassionate head nurse, who acknowledges nurses' efforts (Khalid et al., 2016; Sok et al., 2014), can also lead nurses to perceive the COVID-19 pandemic as an engine for self-growth (Kossek & Lautsch, 2012; Kreiner, 2006). These preliminary thoughts will probably become more relevant not only in times of pandemic, but also in the near future, when nurses, like other professionals, will face the need to work remotely. For example, more nurses are engaged in monitoring home-hospitalized patients and in telenursing (Eriksson et al., 2019; Wahlberg & Bjorkman, 2018). Therefore, it is recommended to equip nurses with an arsenal of coping strategies to better integrate the work and family domains.

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# Balancing Organizational Needs and Personal Risk Factors during the Early Phases of COVID-19

By Anna Zisberg, Ronit Har-Noy, Efrat Shadmi, Ksenya Shulyaev, Rina Asulin, Yael Eilon, Gila Hyams, and Galia Fisher

As the COVID-19 pandemic progresses, healthcare systems prepare to learn from challenges encountered as part of the initial efforts to respond to the outbreak. In Israel, in mid-April there were 10,000 positive COVID-19 cases and around 600 hospitalized. Hospitals, caring for the most severe cases, have taken considerable measures to prepare their workforce. Yet nurses continue to face challenges related to the provision of care during an ongoing pandemic and to their need to balance competing personal needs. Emerging international evidence shows that nurses and other healthcare professionals face significant professional and personal challenges. A German study showed that in the early stages of the pandemic (March–April 2020) healthcare professionals reported significant restrictions of daily work routines and had substantial concerns regarding their own health and even more so about the health of their significant others, which were more pronounced among nurses than among physicians and other healthcare providers (Paffenholz et al., 2020). Studies also reported higher levels of depression, anxiety, and stress, respectively, especially among female healthcare workers (Moayed et al., 2021).



We aimed to examine perceived risk of infection with SARS-COVID-2, resilience and anxiety, and the degree to which personal and organizational factors are related to resilience and anxiety among nurses in Israel during the COVID-19 pandemic.

We administered an online survey to nurses at the Rambam Tertiary Medical Center (led by Rina Asulin, Yael Eilon, and Gila Hyams, Head Nurse) and at the Shoham Geriatric Care Center (led by Galia Fisher and Ronit Har-Noy, Head Nurse) during the period April 16–April 27. The survey included the Generalized Anxiety Disorder (GAD) 7-item questionnaire, the 10-item Connor-Davidson Resilience Scale, and gathered information about perceptions of organizational preparedness in terms of knowledge transfer, availability of personal protective equipment (PPE), perceptions of personal and family members' risk of adverse direct and indirect effects of COVID-19 (clinical, social, and economic), and demographics.

A total of 288 nurses completed the survey (206 Rambam, 92 Shoham). About half (N = 188, 51.4%) reported at least one personal risk factor for adverse COVID-19 effects (e.g., having a child, spouse, or dependent parent with a chronic condition); about 25% reported having two or more risks. About 14% and 11% at Rambam and at Shoham, respectively, reported medium-high anxiety levels, and about a third reported low resilience. Approximately 70% reported high levels of knowledge of PPE use. Availability of PPE was rated as high by 55% to 75% of nurses (depending on type of PPE).

Multivariate analyses demonstrated that perceptions of organizational policies and rules regarding COVID-19 as being clear and of nursing guidelines as clear and consistent were related to higher resilience ( $\beta = .23, p < .0001$ ;  $\beta = .19, p = 0.005$ , respectively), and to lower anxiety ( $\beta = -.18, p = .0003$ ;  $\beta = -.24, p < 0.001$ , respectively), while controlling for personal risk factors, seniority, and position. Most of the personal risk factors were not significant after accounting for organizational preparedness perceptions.



We found that nurses' perceptions of their organizations' level of preparedness are related to personal ratings of resilience and anxiety. These findings are in line with emerging knowledge of the ongoing challenges of healthcare workers in general, and nurses in particular, in light of the ongoing demands brought about by the COVID-19 pandemic (Dimino et al., 2021; Gunawan et al., 2021).

Lessons from these findings were used to guide the medical centers' response and to enhance their knowledge transfer and communication strategies. The response of nurse managers in each center followed similar international efforts, such as those reported by a national homecare organization in Canada. The Canadian organization described a comprehensive approach to addressing the challenges of the pandemic, which included development and implementation of training programs, establishment of new work procedures, fast-track knowledge translation, and establishment of support resources for nurses (Lefebvre et al., 2020). Similarly, reports from the US showed how the American Organization for Nursing Leadership's Dynamic Leadership for Shared Governance program was implemented to engage front-line staff and leverage professional relationships between managers and staff to address unforeseen challenges of the pandemic (Hancock et al., 2021). Recent studies also increasingly report on managerial roles and efforts in improving resilience and helping nurses balance the ongoing demands in response to the COVID-19 pandemic. For example, a US study showed that brief retreats endorsed by nurse leadership can reduce perceived anxiety and facilitate engagement in contemplative practices, which are associated with a decrease in the risk of burnout (Cunningham & Çayir, 2021). Further dissemination of these lessons can help guide organizations on how to support their nursing teams during the longer-run COVID-19 response efforts and in potential similar ongoing emergency situations.

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# The Relationship between Rest Time between Shifts (“Quick Returns”) and Work–Family Conflict among Nurses Who Are Mothers: Sleep Quality as a Mediating Factor

By Sawsan Safiya, Einav Srulovici, and Tamar Shochat



Shift work is common in nursing, as services are needed 24 hours a day, seven days a week. The literature links shift length, type, and direction of rotation to health and functional outcomes (Buchvold et al., 2019; Min et al., 2019). Recent studies focused on the length of rest between shifts, with short lengths (“quick returns”) defined as breaks of less than 11 hours between shifts (Vedaa et al., 2016). In three-shift rotating schedules, quick returns manifest in 8-hour breaks between morning to night, evening to morning, and night to

evening shifts. Compared with longer breaks, quick returns are linked to negative outcomes, such as poor sleep quality and fatigue (Hakola et al., 2010; Min et al., 2019). These outcomes in turn may worsen work–family conflict (WFC), particularly for nurses with children who work on shift work schedules with quick returns (Kunst et al., 2014; Šimunić & Gregov, 2012).

The nursing field is largely composed of women (Boniol et al., 2019), including a high proportion of mothers. Schedules with quick returns are popular because they allow working mothers to condense their weekly shift-work schedule and secure extended stretches of time at home. Yet to date, no study has examined the associations between quick returns, sleep quality, and WFC among nurses with children. Thus, the purpose of the present study was to examine the relationship between quick returns in three-shift rotating schedules (morning-night, evening-morning, night-evening) and WFC, with sleep duration and quality as mediating factors, among nurses with children. We hypothesized that (1) more quick returns are associated with poorer sleep quality, (2) poor sleep quality is related to WFC; (3) more quick returns are related to increased WFC, and (4) sleep quality will mediate the relationship between quick returns and WFC.

A total of 130 nurses from three hospitals in the city of Nazareth in Israel participated in this cross-sectional study, following IRB approvals. Nurses who agreed to participate in the study and met the inclusion criteria were asked to complete a set of questionnaires on a morning shift that is not immediately after a shift with a quick return. Questionnaires included a modified version of the Standard Shift Work Index (Barton et al., 1995), to evaluate WFC and sleep quality; work schedule in the current and past week to determine the frequency of quick returns, workload (Hart et al., 1988), and socio-demographic information. The mediating model was examined using the PROCESS function in SPSS software.

Findings demonstrate that for morning-night quick returns, a higher number of quick returns was significantly associated with poorer sleep quality ( $p = 0.013$ ), which in turn was significantly linked to higher WFC ( $p = 0.010$ ). Furthermore, morning-night quick returns had an indirect effect on WFC through the mediating effect of sleep quality (effect =  $-0.75$ , standard error =  $0.40$ , 95% confidence interval:  $-1.64, -0.10$ ). These associations were not observed with evening-morning or night-evening quick-return work schedules. Relationships between quick returns in the current or past week and WFC did not reach significance.



In conclusion, morning-night quick returns negatively impact sleep quality (directly) and WFC (indirectly). This is likely due to the early start time of the morning shift (07:00 AM) and the inability to nap during the break in the busy afternoon-evening hours at home. Findings suggest that this particular type of quick-return work schedule should be avoided whenever possible. Also, because sleep is a modifiable behavior, nurses should be given self-help tools to improve their sleep quality.

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# Nurses' Work–Life Balance during the COVID-19 Pandemic: A Call to Re-examine the Theory

By Daniel Sperling

The significant and rapid spread of COVID-19 has had an enormous effect on people's well-being, health, and economy. When managing this dynamic and new pandemic, healthcare providers – especially nurses – are positioned at the forefront. They fight the disease at their own personal risk of infection for themselves, their families, and others with whom they may come into contact. In such times, care is extremely stressful and demanding (Graham et al., 2020; Sperling, 2020a) and is frequently associated with anxiety and anger (Huang et al., 2020). Such negative experiences may be related to reduced levels of resilience and burnout and, thus, may increase nurses' intentions to leave the profession (Jourdain & Chênevert, 2010).

Because emergency care settings may be stressful, ethical codes, such as the Emergency Nursing Scope and Standards of Practice, stipulate that while a nurse's primary commitment is to the patient, nurses have a duty to apply self-awareness and self-care when promoting self-health and safety. Importantly, it further emphasizes that a work–life balance (WLB) is paramount for achieving personal growth, whereby structures and processes that enable such a balance (e.g., a healthy work environment) are required. These include shift preferences, time off, means for enhancing personal satisfaction, receipt of compensation for ensuring financial security, reading to develop a creative mind, and ensuring leisure and recreational activities (ENA, 2017).

WLB is defined as “a form of inter-role congruence in which the resources associated with one role are sufficient to meet the demands of another role such that participation in the second role can be effective” (Voydanoff, 2005, p. 825). WLB has two dimensions: fit between work demands and family resources in which family-related resources are adequate to meet the work role, and fit between family demands and work resources in which work-related resources are sufficient to satisfy family demands.

Under the person–environment fit theory (Kristof, 1996; Voydanoff, 2005) stress arises from lack of fit or congruence between the person and the environment rather than from either one separately (Voydanoff, 2005). Fit is of two types: demands-abilities and needs-supplies. *Demands* refers to quantitative and qualitative job requirements, role expectations, and group and organizational norms. Abilities include aptitudes, skills, training, time, and energy – all of which may be used to meet demands. Fit occurs when the person has the abilities needed to meet the demands of the environment. Stress occurs when demands exceed abilities.

*Needs* refers to biological and psychological requirements, values, and motives. Supplies include intrinsic and extrinsic resources and rewards which may fulfill the person's needs, such as money, social involvement, and opportunity to achieve. Fit occurs when the environment provides the resources required to satisfy the person's needs. Stress occurs when needs exceed supplies (Voydanoff, 2005).

This framework regards WLB as a subjective form of need-supplies fit. It is assumed that when a person feels effective in valued roles, this may lead to global balance. Under this theory, need-supplies fit occurs when the environment supplies physical, financial, and psychological resources and task and interpersonal opportunities that meet one's needs, goals, and values (Kristof, 1996). In such situations, involvement balance is being optimized, thereby promoting global balance and its consequences.



In a recent study examining the concerns, threats, and attitudes related to care provision during the COVID-19 outbreak among nurses in Israel, nurses profoundly expressed a conflict between their duty to provide patients with care and their responsibility to society, on the one hand, and their right to self-care in times of a pandemic, on the other hand (Sperling, 2020b). Such conflicts were mostly heightened by nurses feeling greater risk of being contaminated and worry about infecting their loved ones, their patients, and their colleagues. This is in addition to the stress associated with the dynamics of the pandemic, lack of medical and human resources, excessive workload, sense of urgency, and lack of organizational and ethical support. The findings of this study are in line with those of previous research (Choi & Kim, 2018; Kollie et al., 2017; Lee et al., 2020).

Moreover, content analysis of the open-ended questions respondents answered in this study revealed a complexity that is characteristic of the above-mentioned conflict, nurses' multiple areas of concern, the large spectrum of experiences linked to activities and actions required of them, and their need for support (Sperling, 2021). It demonstrated that performing their duty of providing care may come at the cost of protecting their own health and safety. Moreover, their frustration and disappointment following their employers' attitudes during these difficult times portray a worrying denial of the relational dimension of their care activities, their being vulnerable, interdependent, and connected to others (Peter & Liaschenko, 2013) – all of which serve as key factors in their non-work roles. It further exposes how their rational judgment and positioning at this time, reflected in their attempts to protect their salary and work conditions, is filled with employers' ignorance and lack of appreciation. In turn, this situation deprives nurses of the opportunity to enhance their moral identity and need for professional satisfaction (Peter et al., 2018).

Applying the person–environment fit theory to this research demonstrates that nurses' challenges during COVID-19 represent a situation in which their job requirements, role expectations, and organizational norms exceed their skills, training, available time, and energy. Establishing all these aspects, this research refers to a misfit or imbalance between their work and non-work (life) – and, as a result, high stress.

But the research also points to the fact that caring during the pandemic resulted in misfit and imbalance because nurses' psychological requirements and expectations to be seen by their superiors, to have their family interests considered by their employers, and to also be engaged in decision-making pertaining to their shifts schedule and re-positioning were not provided with adequate resources.

More fundamentally, nurses' significant fear and sense of high risk of becoming contaminated and their worry about infecting their loved ones may offer a new situation that current theories on WLB have not addressed: a situation where there is no sequence or competition whatsoever between the levels of demands and abilities or between the levels of needs and resources. Instead, work negates the very possibility of non-work/life through the physical risk of infection and through the psychological denial of the factors that enable nurses' non-work roles. To truly and completely fulfill one's work roles, one must sacrifice one's ability to exist in one's family and to maintain safe and caring relationships with one's family members. Such a situation, which may be observed in other rare cases, calls for further investigation of strategies to allow and promote nurses' fit and balance, under exceptional conditions where it is doubtful whether they can exist at all.

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# Development of Resilience in Nursing Students in Nursing Studies in Practice during the COVID-19 Pandemic

By Dalit Wilhelm

The COVID-19 pandemic has imposed on the nursing staff intense family-work conflicts.

For nursing students, the situation has been more complex. The change in learning environment from face-to-face lectures to online learning, social distancing, and ambiguity had a very strong impact on their psychological well-being during the COVID-19 era (Cao et al., 2020).



In addition, nursing students experience predominantly home–work conflicts. They felt this conflict especially because some have parents in risk groups or close family members; they are still in the learning process, so they are not as “important” as staff; and they lack the relevant knowledge and advanced clinical ability required to care for COVID-19 patients. Some students described family pressure and confusion regarding the relevance of clinical studies in practice during the pandemic. Some family members felt bad when students ate meals apart from the rest of the family in order to avoid contaminating them.

Nursing students reported feeling emotionally overwhelmed by family pressure: “Do not infect us”; “My father is in a risk group and I’m afraid that I will infect him with COVID-19; it’s really dangerous”; “There is not enough protective equipment and we students do not get it, so we can get infected and infect family members.”

To address the unique difficulties of students during the clinical experience, we wanted to share their coping stories. It was also important to share these stories with their family members.

The faculty and staff that accompany the students in the practice devoted much time to encouraging conversations with them. Once students were able to cope with their difficulties, we decided (in the clinical academic unit) to ask them to write success stories from their practice during the pandemic period, and we published them in a newsletter (Figure 1). The purpose of the newsletter was to enable students to bring their unique voice and share their different ways of coping. They enjoyed sharing the stories and were curious to hear from their colleagues. We also encouraged them to share the newsletter with their family members so that they could be proud of the students, and to boost their resilience and their pride. We wanted the students to perceive the deep meaning of the COVID-19 era.

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13.4.2020

Newsletter 1

The Cheryl Spencer Nursing  
Department  
The clinical unit



## Advanced Practice Newsletter

### Introduction – Being an intern during the COVID-19 period



Being an intern during this time is an unusual mix of emotions. It is stress and apprehension along with mission and meaning. It is a fear for the personal families combined with empathy and concern for patients. It is to be there, all the time, without the appreciation of public gratitude but with the appreciation of the staff. At the internship thirsty to experience the area and discover ourselves as staff members, brothers and sisters. We were given during this period a rare opportunity, not only to study but also to stand there alongside the medical staffs in this unique war. We have gained the ability to know ourselves in extraordinary. We arrived y situations, not only as staff members but also as human beings.

We are currently experiencing many challenges and uncertainty regarding what our future holds - personal, professional and student. We all hope for calmer days, and that the pride we feel now will not be forgotten!

Shelly Eliyahu — Internal Medicine Department Rambam

### Tears of hope



Rital Hijazi and Hadas Vendom

Getting to the departments in the shadow of the corona is not easy for all of us especially under the harsh conditions and congestion in which the departments operate.

We are aware that in addition to the corona virus, we may also be exposed to various viruses. But we see ourselves as an integral part of the health care system and I believe we will be able to meet the challenges. I sincerely hope that this period will lead us to a stronger health care system. Hadas Vendom

Figure 1. Newsletter (first page).

# The Cheryl Spencer Department of Nursing PhD Program

The Cheryl Spencer Department of Nursing established the first PhD Nursing program in Israel in 2014. There are currently 32 active doctoral students in the program. A total of 17 students will have completed their PhD program by the end of the 2020 academic year. Annually, five to eight students are enrolled. The PhD program's vision is to foster academic excellence in nursing researchers via the development and practice of, first and foremost, the ability to lead and conduct an independent (with supervision) study. Additionally, students are encouraged to submit or participate in grant writing, to present at national and international conferences, to publish scientific papers, and to participate in the department's seminars and in peer-support activities, including workshops and meetings with graduates. Students are encouraged to submit their dissertation in English (three-manuscript format). The program includes 4 credits of methodological courses (advanced qualitative and advanced quantitative research methods) and a 4-credit (2-semester) dissertation seminar. Prerequisites to the program are completion of MA-level courses in statistics, theories and their application, and the Israeli healthcare system.

## Meet Our New PhD Graduates

### Natalie Flaks-Manov, PhD



Dr. Flaks-Manov's thesis, supervised by Prof. Efrat Shadmi, is entitled "Big Data Readmission-Risk-Prediction Models: The Contribution of Issues Related to the Timing of Prediction, Subjective Clinicians' Assessments, and Compatibility with Consideration for Inclusion in Prevention Interventions."

This dissertation is the first to provide a comprehensive evaluation of the identification of patients at risk for readmission as an integral part of the overall frame for which predictive models are developed, that is, identification of high-risk patients for inclusion in readmission prevention programs. The dissertation demonstrates a potential process for selecting high-risk patients who can benefit from intervention for prevention readmissions. This process considers risk changeability during admission. It also allows perceiving changes in risk through the creation and operation of several models at different times and combines both

information from electronic health systems taken at different times throughout care, taking into account clinicians' assessments of risk and considering clinicians' assessments of patient suitability for intervention. This combination of suggested elements results in increased accuracy and appropriateness in selecting patients at risk for inclusion in prevention interventions. Because reducing readmissions is manifested in improved quality of care, patients' experience, as well as cost reduction, this study may guide policymakers in using the method presented here to focus on the "right" patients and thus improve patient as well as system outcomes.

Dr. Flaks-Manov's research received funding from the Israel National Institute for Health Policy Research (NIHP). The research is published in the following articles:

Flaks-Manov, N., Srulovici, E., Yahalom, R., Perry-Mezre, H., Balicer, R., & Shadmi, E. (2020). Preventing hospital readmissions: Healthcare providers' perspectives on "impactibility" beyond EHR 30-day readmission risk prediction. *Journal of General Internal Medicine*, 35(5), 1484–1489. <https://doi.org/10.1007/s11606-020-05739-9>

Flaks-Manov, N., Topaz, M., Hoshen, M., Balicer, R. D., & Shadmi, E. (2019). Identifying patients at highest-risk: The best timing to apply a readmission predictive model. *BMC Medical Informatics and Decision Making*, 19(1), Article 118.

Flaks-Manov, N., Shadmi, E., Yahalom, R., Perry-Mezre, H., Balicer, R., & Srulovici, E. Identification of patients at-risk for 30-day readmission: Clinical insight beyond big data prediction. Submitted to *Journal of General Internal Medicine*.

**Orly Tonkikh, PhD, RN**

Dr. Tonkikh's thesis, supervised by Prof. Efrat Shadmi and Prof. Anna Zisberg, is entitled "The 'Right Mix' for Hospitalized Older Adults: The Association between Nursing Skill-Mix, Patients' Case-Mix, Hospitalization Care Processes and Functional Outcomes."

The dissertation focused on the association between nursing staffing, processes, and functional outcomes of hospitalized older adults. Nurses are responsible for implementing function-preserving interventions; however, it is unclear whether infrastructures of organizing nursing care contribute to functional outcomes. To address this question, the thesis linked hospitalized patients' survey data with aggregated unit- and day-specific clinical, administrative, and nursing payroll/roster data. Patient-level analysis in modeling function-preserving processes, using decision tree models, identifies postgraduate advanced nursing training as a main contributor to the classification of mobility and food intake. Moreover, patients receiving care from more nurses had a higher risk of decline in cognitive functioning and were less satisfied with the hospital care experience. These findings provide new understandings of nurse staffing considerations and the need for older-adult-tailored interventions and for the development of nursing-resource and process-sensitive measures.

Dr. Tonkikh received the Gerontological Society of America (GSA), Health Sciences Section Person-In-Training Award (2019); a Ministry of Science and Technology Scholarship for presentation at an international conference for doctoral students (2019); and The Cheryl Spencer Institute of Nursing Research & The Graduate Studies Authority, University of Haifa, advanced studies scholarship for research students (2016–2019).

Dr. Tonkikh's research received funding from the Israel National Institute for Health Policy Research (NIHP).

The research is published in the following articles:

Tonkikh, O., Shadmi, E., & Zisberg, A. (2019). Food-intake assessment in acutely ill older internal medicine patients. *Geriatrics & Gerontology International*, 19(9), 890–895. <https://doi.org/10.1111/ggi.13744>

Tonkikh, O., Zisberg, A., & Shadmi, E. (2020). Association between continuity of nursing care and older adults' hospitalization outcomes: Retrospective observational study. *Journal of Nursing Management*, 28(5), 1062–1069. <https://doi.org/10.1111/jonm.13031>

Tonkikh, O., Zisberg, A., Shadmi, E. The role of nurse staffing in the performance of function-preserving processes during acute hospitalization: A cross-sectional study. Under review at *International Journal of Nursing Studies*.

**Mor Saban, PhD, RN**

Dr. Saban's thesis, supervised by Prof. Efrat Dagan and Prof. Anat Drach-Zahavy, is entitled "Mindfulness and Quality of Care in the Emergency Department."

The study contributes to a better understanding of the role of both individual mindfulness (trait and state) and a mindfulness intervention on task performance within healthcare organizations, particularly within the ED patient evaluation process. Specifically, the findings support the positive effects of individual mindfulness and a mindfulness intervention on patient satisfaction in the ED. These findings have important implications for healthcare professionals aiming to achieve enhanced ED work processes, performance, and patient satisfaction. Given the importance of mindfulness, nursing managers should help cultivate it in their healthcare settings. The study's findings also provide empirical evidence to substantiate the assumption that increasing state mindfulness using a mindfulness intervention is suitable for the ED dynamic setting and leads to greater patient satisfaction. This finding is notable because it suggests that the trait-like propensity to be mindful in everyday life may be modifiable (for at least some individuals) through the intentional practice of evoking state mindfulness during the mindfulness intervention.

The research is published in the following articles:

- Drach-Zahavy, A., & Saban, M. (2016). Mindful triage: Improving the quality of care of patients with mental illness in the emergency department. *International Journal of Emergency Mental Health and Human Resilience*, 18(2), Article 333.
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### Chandra Cohen-Stavi, PhD



Dr. Cohen-Stavi's thesis, supervised by Prof. Efrat Shadmi, is entitled "Guideline-Concordant Care in Patients with Multiple Chronic Conditions: Pervasiveness and Precursors."

This study assessed care delivery for patients with multimorbidity compared with the benchmark of disease-centric clinical practice guideline recommendations, and investigated the multi-level factors and reasons behind care decisions. This study was conducted as part of a multimorbidity care management program across 11 primary care clinics. Forty-four guideline recommendations were examined for nine common chronic conditions, with analyses stratified by key factors, for example, acting party (clinician or patient) and disease group.

Among 204 patients with multimorbidity, this study is the first to assess guideline concordance in primary care on multiple levels, showing that guideline deviation occurred for about 20% of the 4,386 guideline-recommended care processes evaluated. Overall guideline deviation was driven more by clinicians not referring care (64%) than by patients not adhering to referred care (36%). This research devised an extensive taxonomy of reasons to explain guideline deviation among multimorbidity patients, with patient- and context-related considerations attributed to almost 50% of the deviation. By dissecting some of the complexity in multimorbidity care management, this study underscores the limitations of applying existing single-disease-based quality-of-care measurement structures to patients with multimorbidity and supports calls to incorporate patient-centered measures into quality frameworks.

The study was supported by the Gertner Institute, Clalit Health Services, and in part by a grant from the Israel National Institute for Health Policy Research.

The research is published in the following articles:

- Cohen-Stavi, C. J., Key, C., Giveon, S., Molcho, T., Balicer, R. D., & Shadmi, E. (2020). Assessing guideline-concordant care for patients with multimorbidity treated in a care management setting. *Family Practice*, 37(4), 479–485. <https://doi.org/10.1093/fampra/cmaa024>
- Cohen-Stavi, C. J., Key, C., Molcho, T., Yacobi, M., Balicer, R. D., & Shadmi, E. (2020). Mixed methods evaluation of reasons why care deviates from clinical guidelines among patients with multimorbidity. *Medical Care Research and Review*. Advance online publication. <https://doi.org/1077558720975543>
- Cohen-Stavi, C. J., Giveon, S., Key, C., Molcho, T., Balicer, R. D., & Shadmi, E. (2021). Assessing guideline-concordant care for patients with multimorbidity treated in a care management setting. *BMJ Open*, 11(1), Article e040961.

*Yael Dishon Benattar, PhD, RN*

Dr. Dishon Benattar's thesis, supervised by Prof. Efrat Dagan and Prof. Mical Paul, is entitled "Choosing Wisely Antibiotic Treatment to Reduce Futile Therapy at End of Life: Cost-Benefit Model Development and Testing."

The dissertation focused on a cost-benefit model development for antibiotic treatment, incorporated within a computerized decision support system (CDSS), to reduce futile antibiotic treatment at end of life. The global threat of multidrug-resistant bacteria necessitates judicious use, avoiding futile antibiotic treatment, such as that at end of life, which confers no benefit in terms of life expectancy but does promote antibiotic resistance. TREAT is a previously developed CDSS for antibiotic treatment, in clinical use, which is based on a cost-benefit calculation; however, it does not take into account imminent death (i.e., reduced benefit for the patient) nor patients' potential for acquisition and spreading of bacteria (i.e., increased costs to the treated patient, other and future patients). We modified the cost and benefit components to account for

terminal conditions. This is a first attempt to address futile antibiotic treatment and complex decision-making processes through an explicit model.

Dr. Dishon Benattar's research received a grant from the Gassner Fund for Medical Research (2017). She received the Graduate Studies Authority, University of Haifa, Scholarship for Excellence in Studies (2014) and the Graduate Studies Authority, Advanced Studies Scholarship for Research Students (2015–2018).

The research is summarized in the following articles (in progress):

Dishon-Benattar, Y., Dagan, E., Shbita, R., Zak-Doron, Y., Leibovici, L., Paul, M., & Eliakim-Raz, N. Attitudes towards antibiotic treatment for patients at end of life and in presence of advanced dementia: A survey among health care professionals.

Dishon-Benattar, Y., Gluck Pfeffer, I., Lause Mogensen, M., Ward, L. M., Leibovici, L., Dagan, E., & Paul, M. Individualization of ecological costs in a computerized decision support system for antibiotic treatment: Effects on the system's recommendations and comparison to physicians' behavior.

# The Cheryl Spencer Institute of Nursing Research



The Cheryl Spencer Institute  
of Nursing Research



The Cheryl Spencer Institute of Nursing Research (CSINR) at the University of Haifa was established about 10 years ago to promote the following goals: (1) to stimulate innovative studies in nursing; (2) to support faculty in obtaining research funding from competitive governmental, philanthropic, and private sources; (3) to promote national and international collaborations among the academic faculty, professional colleagues, and community members on projects contributing to nursing and health science; and (4) to foster and integrate PhD candidates in the nursing department and in academia.

The CSINR also provides a platform for nurses working in the field through initiatives, such as “a day in a nurse’s life,” or by supporting the association of excellence in nursing via Sigma Theta Tau International’s (STTI) first Israeli chapter, Omega Lambda, which currently boasts over 80 members.

Since its establishment, the CSINR has supported faculty members with seed money for small studies. Results of these studies provide preliminary results of larger research proposals submitted to competitive funders. The CSINR has supported researchers and nurses in the community by offering research conferences and workshops, and it has also supported more than 20 doctoral students by contributing partial tuition funding.

During the COVID-19 pandemic, the CSINR supported studies examining the impact of the pandemic. To name only few of these projects:

- Ethical Dilemmas, Perceived Risk, and Motivation among Nurses during the COVID-19 Pandemic
- Symptoms Trajectory of People in Isolation
- Remote Family Medicine Sessions
- Resilience and Nurses’ Well-being and Professional Performance

Some studies’ findings have already been published in leading scientific journals and presented at public forums.

The CSINR will continue to promote and support studies in nursing, and to strive for academic and professional excellence.

For the next three years, the following initiatives are planned:

- The conference entitled “Nursing in the Days of Corona, Evidence from the Field and Research, from the Country and the World,” was held on March 10 with nursing leaders from the World Health Organization (WHO) and Israel. The conference also will provide a platform for Israeli nurses to present written testimonies and photographs associated with the COVID-19 pandemic, as well as research projects.
- The “Symposium Project,” which has been offered to researchers and students in past years, will continue to receive support. This year the program includes discussions regarding the COVID-19 pandemic.
- A series of methodological workshops are being developed for graduate students and faculty members.
- Nursing Research Topic Groups will be established and developed in specific areas of nursing based on our faculty members’ areas of expertise such as, Symptoms’ Management, Resilience in Nurses and Health Organizations, and Health and Nursing Technologies.

To mark one year since the outbreak of the Corona pandemic, the Cheryl Spencer Institute of Nursing Research held a virtual conference, "Nursing in the Days of Corona: Evidence from Research and the Field."

The Chief Nursing Officer of WHO, Elisabeth Iro, gave the keynote lecture and answered questions from the audience. The President of the University of Haifa, Prof. Ron Rubin, and the Dean of the Faculty of Social Welfare and Health Sciences, Prof. Faisal Aziza, delivered congratulatory words.

More than 200 academics and nurses from the nursing field attended and participated in the virtual conference, which provided a platform for an exceptional combination of written and photographed testimonies of nurses from the field, alongside projects and research studies conducted inside and outside the university.

The conference was attended by prominent Israeli leaders and policymakers in nursing. Israel's Chief Nurse, Dr. Shoshi Goldberg; Director of Nursing, Rambam Health Care Campus, Gila Hyams; Chief Nurse, the Community Division, Clalit Healthcare Services, Calanit Kay; and Chair, the Ethics Bureau of Nursing, Israel Nursing Association, Mali Kusha.



As the Head of the Cheryl Spencer Institute of Nursing Research, I am proud to continue and contribute to the long tradition of our academic excellence in the Cheryl Spencer Department of Nursing at the University of Haifa, Israel.

All the best,

Efrat Dagan, PhD, RN, LGC

Head, the Cheryl Spencer Institute of Nursing Research (CSINR)

# News and Updates

## New Faculty Member: Inbal Faran-Perach, MA



In 2007 Inbal completed her BA in nursing at the University of Haifa, and even then, she was promised by some of her teachers (who are still here today) that she would return.

Two and a half years ago, she came back and entered the Department of Nursing as a teaching fellow and clinical coordinator, and last October she was absorbed as a part of the department senior staff.

Inbal has been a nurse for 14 years, and her specialty as a nurse is STDs, adolescent health education, and the health of marginalized populations. As a nurse, she works in two clinics: the mobile clinic for minimizing the harm of prostitution in Haifa, and the “Ve’ahavta” clinic for refugees and status-less people.

Inbal’s MA research was entitled “‘User Experience’ – Masculinity and Vulnerability: A Deep Examination into the Inside World of Men who Consume Prostitution.”

The purpose of the study was to explore the experience that accompanies prostitution consumption in various dimensions in the life of a prostitution consumer: the decision to consume prostitution, the significance of this consumption as part of the masculine identity, the meaning of consumption as part of the search for heteronormative aspects, and the meaning of consumption as an expression of inner desires, passions, but also conscious or unconscious mental-emotional processes.

Inbal’s PhD research addresses the question of what happens in the interface between medical services and the world of prostitution and sex work.

The study is intended to explore the concept of self-care when the medical system meets an “inappropriate patient” who commonly experiences exclusion from health services and an inability to exercise their rights.

The study will ask whether social barriers, stigmas, and fear of insults by the establishment and state institutions can constitute a kind of organizational “disability” and amplify dimensions of vulnerability among patients from marginalized populations to access adequate medical treatment.

As a University faculty member in the Department of Nursing, Inbal teach the courses “Basics of Nursing” and “Clinical Thinking,” and in the coming semester she will open a new course, “Activism in Nursing.”

Inbal considers teaching to be a great honor. In her humble opinion, teaching and educating the nursing profession is critical to training the future generation of nursing in Israel, which is currently carrying the burden of the pandemic. She argues that our location as a university that collaborates with many hospitals in Haifa and the northern area and the importance of a multicultural and peripheral approach add a fascinating and important aspect to the future generation we educate. As a life perspective as well as a professional identity, Inbal sees the choice to be a nurse as a choice to be active within and for society and as a choice to stand at the forefront of action to promote justice and equality in health. That is why the activist position is so important to her, and she expect her students to open their eyes to reality, to identify areas of injustice and inequality – and to choose not to stand aside but to act within them and correct them.

## New Master’s Program: MA in Nursing Specialized in the Field of Social Welfare and Health Technologies

The field of Social Welfare and Health Technologies was identified as one of the areas of development in the Department of Nursing at the University of Haifa in upcoming years. As a result, a new master’s program was initiated. Its purpose is to address the challenges and technological changes of the 21st century and to develop clinical and research fields to implement social welfare and health technologies. Students in the program will be trained for clinical, managerial, and research positions related to the implementation of such technologies. Specifically, program graduates will be able to

promote evidence-based health, prevention of disease, and efficient care provision through an interdisciplinary vision; to promote significant research in social welfare and health; and to manage medical data efficiently, thereby also analyzing trends and processes characterizing social welfare and health in the modern era. Graduates will be able to initiate and lead technology-based projects through professional discourse based on extensive knowledge with people from the engineering sciences. The program consists of courses in various departments of the Faculty of Social Welfare and Health and allows students to study in interdisciplinary environments combined with professional exchange of knowledge.

### Graduates of the first Accelerated Program for Academic Degree Holders (APAD)

The first class of our APAD program – a 2.5-year (7-semester) BA RN program for those already holding an undergraduate degree – graduated (2020)! The demanding program puts a significant strain on work–life balance, as it follows a very demanding schedule for students who are often already balancing between family and work demands. The first class (12 students) completed the program just before the COVID-19 outbreak, and all the students (100%) successfully passed the RN licensing exam. We are very proud of our first APAD cohort and wish them and the 3 additional classes that followed (~35 students each) the best of luck!



# Faculty Achievements and Recent Publications

## Congratulations



Congratulations to **Prof. Cheryl Zlotnick** and **Prof. Daphna Carmeli** for being promoted to the rank of Full Professor.



Congratulations to **Prof. Tamar Shochat** and **Dr. Einav Srulovici** for receiving a research grant from the Israel National Institute For Health Policy Research in the amount of 232,000 NIS. The title of their research is "Between Care Provider and Patient: What Is the Magic Formula of Shift Work Schedules for Optimal Functional and Care Outcomes?"



Congratulations to **Prof. Efrat Dagan** and **Prof. Anat Drach-Zahavy** for receiving a research grant from the Israel Cancer Association in the amount of 45,000 NIS. The research title is "Stigma, Its Expression in Medical Encounters with Cancer Patients and Its Influence on Patient Centered Care." Further congratulations to Prof. **Anat Drach-Zahavy** for receiving a grant from the Ministry of Science (Corona Virus Research) in the amount of 45,000 NIS, for the project "Towards a Comprehensive Meso-Level Model of Resilience in the Face of the 2020 Corona Crisis."



Congratulations to **Dr. Maayan Agmon** and Dr. Rony Strier for receiving a research grant from the Rothschild Foundation in the amount of 100,000 NIS. The research title is "Mapping Universities' Social Innovations and Impact." Further congratulations to **Dr. Maayan Agmon** for receiving a research grant (together with Faisal Azaiza, Rachel Kizony, and Efrat Gil) from the Israel National Institute for Health Policy Research in the amount of 290,000 NIS, for their project "Mapping Facilitators and Barriers among Jews and Arabs toward Use of Geriatric Services."



Congratulations to **Prof. Hadass Goldblatt**, who, together with Dr. Michal M. Elboim and Anat Woldman, a PhD candidate, have been awarded 18,300 NIS from the Minerva Center for Interdisciplinary Study of End of Life, for their research titled "What Is the Fit Between the Need for Palliative Physical Therapy Treatments in the Home Setting and the Scope of Actual Provided Physical Therapy?"



Congratulations to **Prof. Daniel Sperling** for receiving a research grant from the Minerva Center on Intersectionality in Ageing in the amount of 12,000 NIS, for his project "End-of-Life Needs, Expectations and Concerns of Older LGBT People," and a research grant (with Dr. Ori Hochwald) from a joint research fund of the Faculty of Social Welfare & Health Sciences and Rambam Health Care Campus in the amount of 10,000 NIS, for their project "Preterm Deliveries at 22-25 Weeks' Gestation: Medical, Ethical and Legal Controversies and Challenges." **Prof. Daniel Sperling** and his master's student, Wassiem Abu Hatoum, also have been awarded 25,600 NIS from the Mierva Center for Interdisciplinary Study of End of Life, for their research titled "Shared decision-making at end-of-life care for end stage renal disease patients in Israel."



Congratulations for **Prof. Dorit Pud**, **Prof. Michal Granot**, and **Prof. Anat Drach-Zahavy** for being included in the Stanford University's list representing the top 2 percent of the most-cited scientists in various disciplines. Prof. Dorit Pud and Prof. Michal Granot were ranked in the field of Anesthesiology, and Prof. Anat Drach-Zahavy in the field of nursing. The list comprises a publicly available database of 100,000 top scientists across multiple fields, and provides standardized information on citations, h-index, co-authorship adjusted hm-index, citations to papers in different authorship positions, and a composite indicator. Scientists are classified in 22 scientific fields and 176 subfields. Although the list is somewhat biased against low-tenured scientists, it may shed light on the impact of the research conducted in our department on the world-wide scientific community.

## Recent Publications

- Tzemah Shahr, R. T., Koren, O., Matarasso, S., Shochat, T., Magzal, F., & **Agmon, M.** (2020). Attributes of physical activity and gut microbiome in adults: A systematic review. *International Journal of Sports Medicine*, *41*(12), 801–814.
- Matarasso Greenfeld, S., Gil, E., & **Agmon, M.** (Forthcoming). A bridge to cross: Tube feeding and the barriers to implementation of palliative care for the advanced dementia patient. *Journal of Clinical Nursing*. Advance online publication. <https://doi.org/10.1111/jocn.15437>
- Zisberg, A., Shulyaev, K., Gur-Yaish, N., **Agmon, M.**, & Pud, D. (2021). Symptom clusters in hospitalized older adults: Characteristics and outcomes. *Geriatric Nursing*, *42*(1), 240–246. <https://doi.org/10.1016/j.gerinurse.2020.08.007>
- Magzal, F., Even, C., Asraf, K., Haimov, I., **Agmon, M.**, Shochat, T., & Tamir, S. (2021). Associations between fecal short-chain fatty acids and sleep continuity in older adults with insomnia. *Scientific Reports*, *11*(1), Article 4052.
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