A Message from the Head of the School of Public Health – Prof. Orna Baron-Epel

This year 160 students started their master degree studies in our eight different programs. Overall there are about 400 graduate students across the three years of study. In addition, there are 25 doctoral students at various stages of study, 4 Ph.D. students graduated this year after 4 years of study, on average.

As we reported last year, every year the Israeli Council for Higher Education performs a quality evaluation of different fields of study in universities and colleges in Israel. As part of this assessment, the school prepared a comprehensive report regarding the structure, management, research and teaching quality of the school. Preparing this report was an internal quality assurance and assessment process. In May 2017, an international committee visited all the Schools of Public Health in Israel, and a few weeks ago we received their report about our school. The reports of the other schools of Public Health have yet to be published, but our report is excellent and they suggest that other schools in Israel learn from us about certain issues. The committee recommends increasing the school faculty and we hope we will be able to do so and bring in high quality faculty members both in terms of research and teaching. After the publication of all reports and comments, we will publish our report on the school website.

We are working hard on the development of our international collaborations, and this year a number of lecturers from Zagreb visited us as...
part of the European Erasmus program. They gave their lectures in English in a number of our courses so that the students got an opportunity to be exposed to what is happening in terms of public health internationally. The school also signed two new international agreements this year: the first one is with the School of Public Health at Shihezi University, a city in North West of China, and the second one is with Manipal University in India. These agreements will enable further exposure to students and faculty in terms of public health research and teaching internationally and particularly in developing countries. During our visit to China (Prof. Baron-Epel and Prof. Keinan-Boker) we met with students and lecturers, and presented our school to them. We also invited them to join our international program that is being taught for the third year.

We are also working to create collaborations with the University of Connecticut in the U.S., and on the 5th to the 6th of March we will host Professors Schensul from the University of Connecticut who will conduct a workshop about "Public Health Intervention Programs and Community and Culture-Oriented Health Promotion." You are all invited to register as soon as possible.

Last year we held a conference about advocacy that was very successful and brought many participants from outside the university. This is a very hot topic, especially these days where there is much talk about the industry's tendency to influence the members of Knesset in their vote on nutritional labeling.

We are also pleased to report that...
we have received permission from the university to open a new study program in Biostatistics. We are recruiting biostatistics faculty members so that they can teach and develop their research in this program. Hopefully, the new program will open in the next year or two.

This year, we renewed the tradition of awarding a prize to outstanding lecturers. This year, two lecturers, Dr. Maya Peled-Raz and Dr. Zipi Haetzni, both of whom have consistently gotten high marks in the students' satisfaction surveys, have been awarded the prize. We wish them many more years of successful teaching.

The school staff and faculty wishes you good luck on the exams and further success in your studies!
We are very proud of **Professor Manfred Green**, Head of the International Program and former head of the School of Public Health, for receiving a Life Achievement Award for promotion of Public Health in Israel.

The award was presented by the Scientific Committee of the annual conference of the Association of Public Health Physicians and Public Health Schools in Israel for the significant contribution to Public Health and Epidemiology by conducting research, determining policy, education and public activity during his military service and during his various positions in the Ministry of Health. His achievements include establishing and managing the Israeli Center for Disease Control, while educating new generations of students in Epidemiology and Public Health.

Prof. Manfred Green receives the award from Prof. Nadav Davidovich.
Over the past few years the Environmental and Occupational Health Department has undergone a considerable amount of growth. Most significantly, this past year our school received the designation by The Ministry of Economy as a certified training program for occupational hygiene including scholarships for up to 25 new students a year. As a result enrollment in our program has gone up 500% when compared to just two years ago. Occupational and Environmental Hygiene is a field within occupational and environmental health that deals with measuring, controlling and preventing environmental and occupational public health hazards. Graduates of the program will be recognized by The Ministry of Economy and Industry being certified industrial hygienists which will allow them to work for government agencies, private industries, independent environmental sampling laboratories, private consultants and provide expert testimony for the courts and National Insurance Institute of Israel. Our students take courses in environmental and occupational epidemiology, policy, occupational illness, toxicology, occupational health systems, safety and risk management, environmental sampling methods, engineering controls, ergonomics, and occupational health promotion.

The department is also increasing the size of its teaching faculty to accommodate the increase in student demand and course load. Consequently productivity in publication and grant writing has also increased in the department. Our increased collaboration with the Occupational Safety and Health Administration of the Ministry of Economy and Industry as well as the new certification program and funding for quality students have been important in elevating the prominence of the University of Haifa in the field of occupational and environmental health in Israel and internationally.

More information about the department, academic staff, research and teaching program can be found on the school website and in our new brochure:

Prof Ziv Gil, head of the Department of Otolaryngology-Head and Neck Surgery and the Clinical Research Institute (CRIR) at Rambam Hospital, invited Nisreen Khoury Nakhoul from the program of Management Health Administration (MHA), school of public health to present her MA thesis: "The linkage between hospital department level's operative actions and performance measures in department of ENT and Head and Neck Surgery at Rambam Hospital". The thesis was guided by Dr Shuli Brammli-Greenberg head of the MHA program who also presented at the seminar. Dr Brammli-Greenberg presented a comparative review of surgical departments in hospitals in Israel.

Nisreen’s study was a retrospective cohort study that was conducted among 11,245 patients treated at Rambam Hospital's ENT Department between 2008-2016. Furthermore, 2010-2016 satisfaction surveys among patients who visited the department's outpatient clinic and patients that were hospitalized were analyzed. The data analysis included bivariate and multivariate analyses. From a list of core service and outcome measures three were analyzed as time series: the length of stay in hospital, the hospitalization rate and the satisfaction of patients. The study found that the Department Director has the ability to improve the measurement scores by selecting purpose adapted operative actions without considerably increasing costs. The accompanying outcome of these actions is an increase in the Department's output due to reorganization. We found that teamwork and the overall change in the approach to treatment in the Department are of great importance.

The seminar was very successful and the discussion was lively. Among the attendees were senior Rambam Hospital staff including the Director of the Hospital Prof. Rafi Biar, Deputy Director of Research and Development Prof. Karl Skorecki, Deputy Director of Operations Dr. Avi Weissman, Director of the Health Corporation Dr. Ronit Segal Hirshberg and Director of the Economics Department Nora Liebes Schneid.

This study is the first part of a large-scale study conducted by the School of Public Health and the Rambam Health Care Campus to improve management and promote efficiency in the hospital. It is expected that the study will promote the creation of an organizational culture of measurement and improvement of activity and quality in Rambam Hospital in particular and in the Israeli hospitalization system in general.
As a jurist specializing in the field of public health, I am interested in the effect of law on community health. That's why I recently chose to explore the subject of digital documentation of medical procedures.

Recording and documentation of digital information in patient records has become increasingly common in recent years. This involves the use of systems that allow easy and convenient video recording of scopic procedures (i.e. performed by a camera installed on a scope inserted into the patient's body, such as during a gastroscopy), and the embedding of the entire recording in the patient's medical file, making it available to the patient as part of his medical record.

This evolving documentation tool may have far-reaching implications for the quality of treatment, as well as for the rights of patients and caregivers - which have not yet been sufficiently illuminated in empirical research.

Estimates were made in the literature that such recording would contribute significantly to collaborative and better medical decision-making processes [1]; improve follow-up procedures [2]; improve students' interns' and young physicians' training processes [3]; promote better risk management [4]; and even lead to a direct improvement in treatment quality, due to practitioners' awareness of being observed by others [6.5]. All of these factors are expected to lead to an overall improvement in the quality of treatment provided to patients.

In addition, assessments have been made in the literature regarding the possible protection, inherent to such systematic recording, against unjustified lawsuits [8,7], as well as the contribution of these recordings to transparency and therefore trust between patients and caregivers.

On the other hand, recordings of this kind raise the risk of harm to the privacy of both patients and care takers (who are photographed or their voices are recorded), and are perceived as
a factor that may actually increase the filing of claims against health institutions.

In light of all of the above, we decided to conduct a survey that examines the positions of patients and physicians regarding such documentation, and through it to identify supporting factors as well as obstacles to broad assimilation of such documentation techniques.

In doing so, 417 ambulatory patients who came in for endoscopy, were interviewed anonymously and asked to provide demographic details, morbidity details, and were asked about their attitudes regarding video recording of the procedure and its retention in their records. Sixty-eight gastroenterologists participated in a parallel internet survey, which was distributed with the assistance of the relevant professional union.

Results showed that 66.4% of patients expressed interest in digital documentation of the endoscopic procedure, of which 90.5% were also interested in receiving a digital copy of the recording. Most of the patients explained their interest in the recording, as enabling continuity of treatment (between the hospital and their community doctor) as well as future follow-up (23.1% and 42.8%, respectively), and expressed confidence in their caregivers.

On the other hand, only 43.6% of the physicians indicated that they support such digital documentation (utterly 27.4% opposed it), 32.2% supported its inclusion in medical records, and only 22.6% supported the active provision of a copy of the recording to the patient. The most interesting finding in the study concerned the main arguments, which supported both the physicians' resistance and physicians' support for the recording and documentation processes. The main reason given for support was the expected improvement in training of interns and students (4.9 / 7) and, surprisingly, immediately after that ranked the inherent defense such recording may supply against negligence lawsuits (4.8 / 7). Physicians ranked these two arguments significantly higher than any other reason (p < .05), while the rating of continuity of treatment – dominant among patient respondents as a supporting reason was rated least important among physicians.

It should be noted that 63% of gastroenterologists surveyed had the technical ability to record procedures (usually or always), but less than half of them recorded in practice. The existence of institutional guidelines requiring recording and documentation was found to be the only significant predictor of the actual performance of routine recording. The physicians' positions regarding the legitimacy of
the recording and the need for it did not affect their use of the actual recording technique. No socio-demographic or other background predicted the support or resistance of patients or doctors to the recording itself as well as its accessibility to the patient.

Our research exposes the gaps between attitudes of patients and physicians regarding the digital documentation of medical procedures, as well as the concerns about increased litigation, which at this stage hinder the implementation of a coherent and extensive documentation and accessibility scheme.

Published in:


**Bibliography**


Until 1995, the routine of immunization program for children in Israel was one of the best in the world. The stages of including a new vaccine in the program were:

1. Recommendation of the Advisory Committee on Infectious Diseases and Immunizations.
2. Approval of the recommendation by the Head of Public Health Services.
3. Approval by the Ministry of Health.
4. Negotiations of the Ministry of Health with the Ministry of Finance to include a budget for the purchase of the vaccine at the "budget base" of the Ministry.

A new vaccine was usually included within 3 years of the recommendation. The enactment of the National Health Insurance Law changed this as it did not include an appropriate mechanism for allocating new vaccines. Additionally, the Ministry of Finance decided against allocating more funds for new vaccines. As far as the Ministry of Finance was concerned, according to the law, the way to add new vaccines was only under the framework of "adding new technology".

Between the years of 1999-2007, when the developed countries continued to add new vaccines, the addition in Israel was halted. This created a significant gap between Israel's routine immunization program and that of the developed countries. Under this nine years period, the Advisory Committee recommended to add five vaccines to the routine immunization program of childhood age. However, none of them was added.

The vaccines were:
1. Pneumococcal conjugate vaccine.
2. Rotavirus vaccine.
3. Vaccine against varicella.
4. The vaccine against pertussis in eighth grade.
5. The vaccine against the HPV virus (for girls).

Considering this situation, the Ministry of Finance agreed in 2007 to gradually finance four of them until 2011. Funding the first three vaccinations were gradually inserted into the base budget of the Ministry of Health.

Inclusion of vaccines through the "Basket" Committee since 2011

In 2011, a vaccine was included for the first time through the "Basket Committee" budget: the Rotavirus vaccine. Since then it has been
difficult to add vaccines to the basket. Nevertheless, the following two vaccines were included in the routine immunization program through the "basket committee":

1. The vaccine against the papilloma virus for eighth graders girls, starting in 2013.
2. The pertussis vaccine for pregnant women, starting in 2015.

In addition, two vaccines for risk groups were included through the "basket committee". Their cost to the "basket" is very low:

1. The vaccine against the papilloma virus for men at high risk until the age of 26 was included in 2014.
2. The vaccine against 4 strains of meningococcus for people at high risk was included in 2016.

The committee received repeated vaccination inclusion requests, but they requests were rejected including the following vaccines:

1. The Zostavax vaccine for the elderly, was submitted 5 times, last time in 2018.
2. The Papilloma vaccine as a Cath Up program for girls 15-18 years old was submitted 4 times, until the program lost its relevance due to the passage of time.
3. One dose of the adult pertussis vaccine, was submitted 6 times.

Two solutions have been found that bypass the basket committee. The first is the vaccination program for the employees of the health system which was defined as an action to keep the safety of the health care workers and the patients. The second is the vaccination against the papilloma virus for boys in eighth grade. On January 29th 2015, the Advisory Committee on Infectious Diseases and Immunization recommended reducing the number of doses of papilloma virus vaccines among those who received a first dose when they were less than 15 years of age from 3 to 2. This reduction substantially reduced the cost of the vaccine program. The head of the public health services relocated this budget (not through the "basket committee"), to implement another recommendation of the Advisory Committee on Infectious Diseases and Vaccines: to add the vaccine against the papilloma virus to the routine vaccination program for boys in eighth grade (in addition to girls). Israel was the sixth country in the world to include this vaccine in the routine immunization program for boys.

**Should some vaccines be removed from the "basket"?**

On August 7th, 2016, the committee discussed removing a vaccine against Respiratory Syncytial Virus (RSV) from the health basket. This change was discussed based on considerations of cost / benefit estimations and the fact that it was also accepted in many other developed countries, including the U.S. If the Advisory Committee would adopt the recommendation, it might save 115 million NIS a year, which the Advisory Committee expected
would be used to add recommended vaccines to the "basket." This is a very significant amount: 48% of the whole annual budget for the purchase of vaccines (240 million NIS).

Nevertheless, the Committee did not recommend removing the vaccine from the basket. Indeed, removing a health technology from the "health basket" is a complicated process that has never been done before. It is feasibly done in two scenarios according to the National Health Insurance Law, as long as there is a medical justification for removal from the basket.

A. Section 8 (b) (1) - Withdrawal by the Minister of Health with the consent of the Minister of Finance and with the approval of the Government and the Knesset Labor and Social Affairs Committee.

B. Section 8 (b) (2) (a) - "Replacement" will be made by the Minister of Health, in consultation with the Minister of Finance and with the approval of the Government (i.e., the removal of service against the addition of another service).

There is, however, no medical justification for removing the vaccine against RSV from the "basket". In general, it is a very safe and effective vaccine.

**Summary**

The immunization program of Israel is considered high quality, thanks to past achievements and improvisations made outside the basket. Nevertheless, the current situation in which there are long-lasting difficulties with including new vaccines through the basket committee harms maintaining its high quality level. Considering this, the Advisory Committee on Infectious Diseases and Immunizations recommended that a separate framework should be established for the addition of new vaccines to the program. Indeed, ways must be found to influence the "basket committee" to give more preferential status to vaccines than what it has given in the last years.
Various types of primary care are implemented in order to provide effective ways of coping with the rising burden of chronic illnesses worldwide, and its' effect is yet to be examined. A quazi-experimental, mixed methods study compared an Independent Physician Model with two multidisciplinary Models (broad model = Team and downsized model = Collaboration) in Maccabi Health Services (MHS).

**Phase 1:** Explored the association between health-professionals' characteristics and their clinical activities, through in-depth interviews (n=33) and computerized questioners (n=1,230, 29.9% response rate).

**Phase 2:** Focused on the association between the type of primary care model and patients health outcomes based on extracted data from MHS health computerized records and using a hierarchical linear model analysis (HLM).

**Findings**

**Phase 1:** Most interviewees perceived multidisciplinary work and patients' empowerment as the best form of medicine. The main barriers were low self-efficacy, negative attitudes towards cooperating either with other health professional, or with patients and limited sense of obligation to MHS. The two multidisciplinary models presented similarly higher levels of training as well as implementation of health education activities, compared with those of the Independent Physicians' Model.

**Phase 2:** Most health outcomes examined were significantly associated with the type of primary care model. Patients in the multidisciplinary models presented better health outcomes (Teamwork Model in diabetic patients and the Collaboration Model in cardiovascular patients). Medium and large sized clinics were associated with better adherence to check-up and health education group, as well as improved risk factor management. Registrating to health education groups was associated with improved adherence to check-ups, screening, influenza vaccinations and improved risk factor management.
Furthermore, affiliation with multidisciplinary models canceled the association between socioeconomic status and check-up adherence, risk factor management and health group adherence.

**Conclusions and Recommendations**

Multidisciplinary models are associated with better health outcomes, compared with the Independent Physicians Model. The downsized multidisciplinary model presented improved outcomes, similar to those of the broad (Teamwork) model. This may enable health systems to successfully cope with limited resources. The effect multidisciplinary models has on socioeconomic status and morbidity levels may assist in reducing health inequalities. Health outcomes were associated with additional personal and organizational factors. Organizational support may enhance patients' empowerment and multidisciplinary capabilities, further promoting the populations' health.
Background
Unintentional injuries among children are the leading cause of disability-adjusted life years lost and a large burden of morbidity. Injuries can be attributed to many factors, at all four ecological levels of society; these may contribute to the risk of a child’s injury. Identifying and understanding the risk factors is a first step in preventing injury. It is important to examine the risk factors where they occur, namely in terms of population group, place of residence, socioeconomic conditions, etc., in order to focus intervention programs where the risks are the highest.

Theoretical framework
This study used the Socio-Ecology Model (SEM) to understand the various risk factors for child injury and the complex interactions between the various factors. The model is usually presented at four different levels: individual level, family level, community level and level of society (sometimes also used at the state level). The model allows us to understand the interaction not only between different factors at each level, but also between the different levels. In Baron-Epel and Ivankovski (2014), the SEM was presented in the context of child injury, with the addition of three elements: behavior, physical environment and social environment. In addition, at each of the four levels, the socio-economic level of the individual and the community was modelled as having an impact on children's vulnerability.

Objectives: To identify the groups of children who are at high risk of injury in the Jewish population in Israel. This was achieved by measuring individual and societal risk factors predicting child injuries of children aged one to six, including personal characteristics, attitudes and behavior of the parents and characteristics of the immediate environment.

Methods: A prospective, quantitative, follow-up study was performed. The study population included 380 parents of children aged one to six years, living in various communities throughout Israel. Parents were interviewed three times, three months apart. Injuries were defined as minor injuries occurring during the past three
month and required not only parental attention to medically attended injuries but also treatment by a doctor or nurse or visit to emergency medical services, or hospitalization. In addition, data on socioeconomic status, attitudes and reported safety environment were collected.

**Results:** In a nine months period, 43% of parents reported that their child was injured and 13% of children were injured more than once. In a multivariable logistic regression model only three variables predicted injury in children: gender, education and injury in the past. Boys (OR 1.77, 95%CI 1.08, 2.89), children of parents with academic education (OR 2.07, 95%CI 1.23, 3.47) were more prone to injury. In addition, children that were injured in the past were 2.15 times more likely to be injured than children who were not previously injured (95% CI 1.03-4.51).

**Conclusions:** The incidence rate of children aged one to six was more than 40% during a six-month follow-up period. The risk factors for injury are numerous, but in the model that incorporates all the risk factors together, it is apparent that the predictive variables focus on the parent and child's personal circle: boys, children of parents with relatively high education and children who experience injury in the past are more likely to be injured. Intervention programs should focus on the individual level of the child and the parents in order to prevent injuries at the same time as it needs to be remembered that all levels of influence are related to each other and cannot be separated.
Prof. Orna Baron-Epel

Publications:


Recent Grants:

Baron-Epel, O., & Key, C. Characterization of the factors that influence using online services and their impact on the control of diabetes. Funded by The National Institute for Health Policy Research.

Baron-Epel, O., Obid, S., Bord, S., & Kabaya, D. Development of interventions to prevent brucellosis via community participations. Funded by Ministry of Agriculture.

Baron-Epel, O., & Tesler, R. Participation in a net ball league increases social capital and promotes health and wellbeing- MamaNet. Funded by MOST.

Prof. Rafael Carel

Publications:


Greenberg, N., Carel, R.S., Derazne, E., Bibi, H., Shpriz, M., Tzur, D., & Portnov, B.A. (2017). Modeling long-term effects attributed to Nitrogen Dioxide (NO2) and Sulfur Dioxide (SO2) exposure on asthma morbidity in a nationwide cohort in Israel. Journal of Toxicology and Environmental Health A, 80(6), 326-337.


Prof. Ronit Endevelt

Publications:


Recent Grants:

Endevelt, R. Complimentary Feeding. Funded by WHO.

Endevelt, R. Diabetes research in hostels for psychiatric patients. Funded by Ozma.
Dr. Anat Gesser-Edelsburg

Publications:


Dr. Anat Gesser-Edelsburg (continue)

Publications (continue):


Recent Grants:

Feniger-Schaal, R., Keisari, S., Palgi, Y., **Gesser-Edelsburg, A.**, Yaniv, D., Ben-David, B., & Golland, Y. Mirror Game in Older Adults and its influence on Emotional, Social Indexes and Cognitive Performance among Old People. Funded by University of Haifa, Faculty of Social Welfare & Health Sciences.

**Gesser-Edelsburg, A.** Lowenstein, L., Salmon, A., & Shteinberg, D. Developing a Model Based on the Positive Deviance Strategy, to Prevent Hospital-Acquired Infections in Israel. Funded by The Israel National Institute for Health Policy Research.


---

Dr. Roni Elran-Barak

Publications:

Prof. Manfred Green

Publications:


Recent Grants:

Green, M.S., Dor, M., & Sznitman, S. Perceived efficacy of medical cannabis. Funded by Israel National Institute for Health Policy Research.


Muhsen, K., & Green, M.S. The role of social determinants and networking in inequalities in health services utilization between Jews and Arabs in Israel. Funded by National Institute for Health Policy Research.
Prof. Shlomo Hareli

Publications:


Prof. Lital Keinan-Boker

Publications:


Prof. Lital Keinan-Boker (continue)

Publications (continue):


Prof. Lital Keinan-Boker (continue)

Publications (continue):


Recent Grants:

Prof. Shai Linn

Publications:


Prof. Shai Linn (continue)

Publications (continue):


Dr. Maya Negev

Publications:


Recent Grants:

Negev, M., Berman, T., Reicher, S., Ardi, R., & Shammai, Y. Environmental chemicals in toys and baby products: Quantitative analysis and regulatory assessment. Funded by the Environment and Health Fund.


Negev, M., Feitelson, E., Razin, E., & Segal, E. Overcoming the implementation gap: Fitting policy packages for retrofitting buildings to local authorities in Israel. Funded by Ministry of Science.
Dr. Liora Ore

Publications:


Dr. Maya Peled-Raz

Publications:


Recent Grants:


**Prof. Shmuel Rishpon**

**Publications:**


---

**Dr. Lisa Rubin**

**Publications:**


Dr. Sharon Sznitman

Publications:


http://dx.doi.org/10.1016/j.drugpo.2016.11.010.


Recent Grants:

Dr. Galit Weinstein

Publications:


Dr. Shira Zelber-Sagi

Publications:


Dr. Shira Zelber-Sagi (continue)

Publications (continue):


Dr. Shira Zelber-Sagi (continue)

Publications (continue):

