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Dean of Graduate Studies  
School of Public Health

### Thesis Approval

**Knowledge Attitude and Practice (KAP) Study of the Palestinian Policy  
Makers Opinions towards Public Health Concept, Issues, and Education**

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## Abstract

Public health is essential to the health and well-being of the people. Though, carrying out its mission through its organized and interdisciplinary effects, it addresses the social, physical, mental, and environmental health concerns for the communities.

The main aim of this study was to assess the knowledge, attitudes, and practices of decision and policy makers regarding their understanding for public health concept, issues, and education programs applied in Palestine and the application of public health training at the university both at the master and bachelor degree level. Therefore, the general objectives were to examine the knowledge of decision and policy makers about the concept, issues and application of public health science; to assess their perception and attitudes for the essentiality of public health science for the development of health level in the Palestinian community; to assess their knowledge, attitudes and practices of the level of education needed in Public Health; and to highlight the areas of need assessment of public health specialties in Palestine.

We used in this study two stages type design and research method: first stage was a quantitative cross-sectional study, purposive non-random sample, and the second stage was a qualitative, focus group discussion method.

For this study, in the first stage 140 policy makers and community leaders were invited to participate. However, we only collected data for 104 participants. In the second stage we carried out 2 focus groups discussions among two levels of policy makers, i.e. second level policy makers (i.e. government, non-governmental health organizations, universities, and community leaders) and third level policy makers (.e. schools principals and teachers).

In the first stage results, data was presented under each category as general data using in a univariate format using frequencies and chi-square ( $\chi^2$ ) test of statistical significance

( $p < 0.05$ ). Medians were also used as a measure of tendency for the type of scale we used. Moreover, Kendall's tau testing for ordinal data was used as a measure of association.

Results showed that there has been obvious significant difference in the knowledge of public health concepts and issues among the various policy makers that was affected by their educational level. Unfortunately, this was obvious among first level policy makers, who should have more knowledge about the various education programs implemented at the various universities in Palestine.

Regarding the core of specialties in public health and the suggested degree level, master versus bachelor, the more educated respondents showed a preference for specialties in biostatistics, health policy and management, MCH as well as nutrition. However, this finding varied by the place of resident of the policy makers. Those living in urban areas strongly agreed to have a master in biostatistics compared to those living in villages (17.4%). Also, those living in villages were concerned with programs at the bachelor level in field of specialties in mother and child health, communicable and non-communicable diseases and nutrition health compared to those living in urban areas.

Regarding the role of public health degrees in helping its graduates to find a suitable job or even a career, mainly most respondents had no opinion or disagreed that public health graduates can have jobs as epidemiologists or human resources managers or even mental health consultants. This finding was reflected in their opinion regarding directing their employees to have one of the specialties in public health. Approximately, 40% of respondents encouraged their employees to join specialties at the bachelor programs of environmental health, occupational health, biostatistics and epidemiology, demography and family health and nutritional health, and the rest of fields were less encouraged. In addition, about 40% of respondents encouraged their employees to join specialties in master programs of biostatistics and epidemiology, health policy and management, demography and family health, mother and child health, communicable and non-communicable diseases, and althnutritional he.

The results of the first stage study were supported by the finding of the focus groups discussion. The focus group discussions results showed that there should be a national forum from all governmental and non- governmental institutions. Cooperation between universities and ministries such as Ministry of education should be facilitated, in particular after adding public health concepts and issues in the curriculum of several levels at the schools. There is a need for upgrading the graduates at the bachelor level of issues of concern, such as environmental health, family health, adolescences health and others. Therefore, there was a recommendation to have a continuing education program for teachers working at schools. This was emphasized strongly by schools responsible and teachers at schools, who encouraged bachelor programs in health promotion, occupational and mental health. The need for master program was encouraged by policy makers working in other ministries and non-governmental organization, who emphasized on the need for having a master level but only with training in developing research by the thesis track and not at the comprehensive exam track that is used in most universities and weaken by itself the level of master degree that is given in the local universities.

In conclusion, there is a need for educating policy makers about public health concepts, issues, and education programs in Palestine. Training seminars and workshops, brochure and other advertising tools should be used to open the knowledge about public health. For the education programs, there is a need for both bachelor and master programs in public health in Palestine, in addition to continuing education program. Priority areas in each field of specialty should be done through cooperation between universities, ministries, non-governmental organizations, and schools principals.

## الخلاصة

الصحة العامة هي أمر أساسي لصحة و سلامة الجميع و تتمحور مهمتها حول تنفيذ جهود منظمة و متنوعة من خلال الاهتمامات الصحية المجتمعية، البدنية، النفسية، و البيئية للمجتمع.

الهدف الرئيسي من الدراسة هو قياس مدى المعرفة لصناع القرار و استيعابهم و توجهاتهم و أدائهم المتعلق بمفهوم الصحة العامة و مواضيعها و البرامج التعليمية المطبقة في فلسطين بالاضافة الى التطبيق التربوي في الصحة العامة على المستويين: البكالوريوس و الماجستير. لذا، كانت الأهداف الرئيسية هي فحص مدى إلمام صناع القرار الفلسطيني بمبادئ و شؤون و تطبيقات الصحة العامة، فحص نظرتهم و توجهاتهم لأهمية علوم الصحة العامة من أجل تطوير المستوى الصحي في فلسطين، فحص مدى إلمامهم و توجهاتهم نحو المستوى التعليمي المطلوب في الصحة العامة و أخيراً تسليط الضوء على التخصصات في الصحة العامة و التي نحتاج إليها في فلسطين.

استخدم في هذه الدراسة نوعان من أساليب البحث العلمي و على مرحلتين: المرحلة الأولى: دراسة كمية مقطعية غير عشوائية، و المرحلة الثانية هي دراسة نوعية عبارة عن مناقشات بورية.

من أجل تحقيق الدراسة، تم دعوة 140 صانعاً للقرار و قائداً في المجتمع و الذين يعنى لهم العمل في الصحة او صنع القرارات المتعلقة بالصحة او بالتعليم بشكل عام او بالبحث و التطوير، للمشاركة في المرحلة الاولى حيث قام 104 صانع قرار بالاستجابة فقط. أما في المرحلة الثانية، فقد تم تنفيذ لقائين بوريين لمستويين من مستويات صناع القرار مثل المستوى الثاني لصناع القرار مثل المؤسسات الحكومية و المؤسسات الصحية غير الحكومية و الجامعات و قيادي المجتمع، بالاضافة إلى المستوى الثالث من صناع القرار الذي يضم مديري و معلمي المدارس.

في المرحلة الأولى، فإن النتائج عرضت تحت كل مجموعة كبيانات عامة بطريقة احادية التباين باستخدام التكرار لكل منها و الكاي المربع ( $\chi^2$ ) لذوي الدلالة احصائيا. استخدمت الوسائط ايضا " كمقياس للنزعة حسب نوع المقياس المستخدم. بالاضافة لذلك، فإن احصاء kendell's tau استخدم ايضا لقياس للبيانات المرتبة.

النتائج أظهرت وجود فرق واضح في الالمام بمفاهيم و مواضيع الصحة العامة بين مختلف صناعات القرار و الذي تأثر بمستواهم التعليمي. للأسف تلك الظاهرة كانت واضحة بين المستوى الأول من صناعات القرار و الذين يتوقع منهم أن يكونوا ملمين أكثر بمختلف المواضيع و البرامج المطبقة في مختلف الجامعات الفلسطينية .

بالنسبة للتخصصات الأساسية في الصحة العامة و الدرجة العلمية المقترحة سواء ماجستير أو بكالوريوس، كلما زاد المستوى التعليمي، كلما كان الاختيار باتجاه الإحصاء الحيوي، الإدارة والسياسات الصحية، صحة الأم و الطفل بالإضافة الى علم صحة التغذية. بالرغم من ذلك، فإن تلك النتيجة اختلفت وفقا لمكان السكن الخاص بصناع القرار فمثلا سكان المدن وافقوا بشدة على برامج الماجستير في الإحصاء الحيوي بالمقارنة بسكان القرى بنسبة 17.4%. ايضا سكان القرى كانت توجهاتهم نحو تخصصات البكالوريوس في مجالات صحة الام و الطفل، الاوبئة المعدية و غير المعدية، و علم صحة التغذية.

بالنظر إلى دور الدرجات العلمية في الصحة العامة في مساعدة خريجها للحصول على وظيفة مناسبة، فمعظم المستجيبين لم يكن لهم رأي أو عارضوا امكانية حصول خريجي الصحة العامة على وظائف مثل مقني بيئة صحية، متخصصين في الموارد البشرية، أو حتى مستشارين نفسيين. هذه النتيجة، انعكست على آرائهم بالتسمية لتوجيه موظفيهم نحو التخصصات في الصحة العامة. حوالي 40% من المستجيبين شجعوا موظفيهم للاتحاق ببرامج البكالوريوس في الصحة البيئية و المهنية و الإحصاء الحيوي و علم السكان و صحة العائلة و علم صحة التغذية أما باقي التخصصات فكانت أقل ترحيبا. بالإضافة لذلك، حوالي 40% من مجموع المستجيبين يشعرون

موظفيهم للالتحاق ببرامج الماجستير في الإحصاء الحيوي و علم البيئة، الإدارة والسياسات الصحية ، علم السكان و صحة العائلة، صحة الأم و الطفل ،علم الاوبئة المعدية و غير المعدية،و علم صحة التغذية.

نتائج المرحلة الأولى انسجمت مع نتائج اللقاءات البؤرية فقد أظهرت ضرورة وجود وثيقة وطنية حول الصحة العامة، متفق عليها من جميع المؤسسات الحكومية و غير الحكومية. كما أكدت أهمية و وجوب تسهيل و تدعيم التعاون بين الجامعات و الوزارات مثل وزارة التعليم بشكل أساسي بعد إضافة أسس و مواضيع الصحة العامة لمناهج المدارس على عدة مستويات. هناك حاجة أيضا لتطوير الخريجين في مرحلة البكالوريوس في مواضيع الصحة البيئية و صحة العائلة و اليافعين و غيرها. لذا، هناك توصية من أجل استمرار البرنامج التعليمي للمعلمين في المدارس. هذه التوصية كانت ذات صدى قوي من قبل مديري و معلمي المدارس الذين شجعوا برامج البكالوريوس في التوعية الصحية، الصحة المهنية و النفسية. أما الحاجة إلى برنامج ماجستير، فقد شجعه صناع القرار العاملين في الوزارات و المؤسسات غير الحكومية الذين ركزوا ليس فقط على برامج الماجستير و إنما أيضا على التدريب على تطوير البحث العلمي عن طريق مسار الرسالة، وليس مسار الامتحان الشامل المستخدم في معظم الجامعات و الذي يضعف المستوى العام لدرجة الماجستير في الجامعات المحلية.

في النهاية، يوجد حاجة إلى تنقيف صناع القرار عن مبادئ الصحة العامة و مواضيعها و برامجها التعليمية في فلسطين. المحاضرات التدريبية وورشات العمل و الكتيبات و الأدوات الترويجية الأخرى، يجب الإستعانة بها لتوسيع آفاق المعرفة حول هذا الموضوع الهام. بالنسبة للبرامج التعليمية، هناك حاجة ملحة لبرامج البكالوريوس و الماجستير في الصحة العامة، في فلسطين، بالإضافة إلى الاستمرار في البرنامج التعليمية. كما يجب التركيز على المواضيع الملحة و ذات الأهمية في كل مجال من التخصص من خلال التعاون المشترك بين الجامعات و الوزارات و المؤسسات غير الحكومية و مديري المدارس. أيضا" هناك ضرورة للقيام بمؤتمرات و ابحاث مشتركة تضم كل الجامعات الفلسطينية المتخصصة بالصحة العامة.

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## 1.1 Background

Public health is defined as “...*the science and the art of preventing disease, prolonging life, and organized community efforts for the sanitation of the environment, the control of communicable infections, the education of the individual in personal hygiene, the organization of medical and nursing services for the early diagnosis and preventive treatment of disease, and the development of the social machinery to ensure everyone a standard of living adequate for the maintenance of health, so organizing these benefits as to enable every citizen to realize his birthright of health and longevity*” (Thompson, 1996). Throughout its organized and interdisciplinary effect mission, public health addresses the physical, mental, and environmental health that is of a high concern of all communities (Association of schools of public health, ASPH, 2006). This mission can be achieved through the application of health promotion, disease prevention technologies, and interventions (Remington, et al, 1988), through assessing community health status and the presence of adequate resources for the community through problems identification; developing health policy, developing proper programs to carry out the health policies; and assuring that necessary, high quality, and effective services are available (Thompson, 1996).

Public Health developed through pioneering epidemiological studies, devising many forms of preventive medicine and community health promotion. Reforms pioneered in many areas have improved the health of the general population. The twentieth century has seen a dramatic expansion of the scientific basis for Public Health (Tulchinsky & Varavikova, 2000)

The scientific knowledge on which Public Health is based spans a broad range of professional disciplines which can be divided into six areas: *epidemiology and statistics*; the basis for the assessment functions of Public Health, *biomedical sciences, environmental health sciences, social and behavioral sciences, and health policy and management* (Schneider,2000).

The Institute Of Medicine's (IOM's) report entitled *The Future of the Public's Health*, which was build upon previous thinking, describes the public health system as made up of several “Actors” working together to improve population health and

eliminate disparities. Actors include government public health agencies, health care delivery system, public health and health sciences academia, communities, business and employers and media (Public Health Data Standards Consortium, 2006).

## **1.2 The Global Public Health Training and Education Programs**

The changes brought about in schools of public health internationally represent only the beginning of a process of developing public health. While still operating within their capacities to provide knowledge and understanding of health status of the population in addition to the rest of concepts and functions of public health, schools are increasingly finding new constructs, new ways of reinventing their practice mission and make it relevant to the public health needs for nowadays as well as the future (Remington, et al, 1988).

Global efforts were acting on establishing new public health educational programs such as the OSI (Open Society Institute) and other international agencies that are providing large scale support for developing schools of public health in countries of Eastern Europe, Russia, and the newly independent states (Tulchinsky, 2001). Because countries of Eastern Europe and the Former Soviet Union are facing a complex mix of a public health crisis of high mortality rates and at the same time endeavoring to reform their health systems, there has been a profound need for changes in the concepts of public health in these countries and in the ways to promote it (Tulchinsky, 2001). The purpose of these schools was to develop specialization degrees in public health education and excellence in research and service in many fields of public health to provide the locus for training new cadres of public health workers. As part of the program, the Hebrew University-Hadassah Braun School of Public Health and Community Medicine has, since 1970, run an International Master of Public Health (MPH) Program (Tulchinsky, 2001).

In Western Europe, a study in 2001 that was performed at the University of Maastricht in the Netherlands focusing on Bulgaria revealed that there are both strengths and opportunities for the establishment of a modern school of public health. It was found that this school should be with a top priority to be established with a multidisciplinary and an interdisciplinary orientation both on the bachelor and master

## 6.9 Recommendations

As we seen from both the quantitative questionnaire study and the focus groups discussions, the following recommendations could be of great significant in the potential importance of education in the field of public health.

1. A national forum should be formed from all governmental and non- governmental ministries and institutions, in addition to the universities and community leaders in the field.
2. A national library for health should be initiated.
3. Priorities in public health education and levels should be done through a needs assessment process.
4. Universities should be directed by a national plan through Higher Ministry of Education to have specialties of need at the national and community level.
5. Regarding the curriculum:
  - a. There should a development of all universities curriculum that reflects the national emerging needs.
  - b. Curriculums should be both internationally and locally oriented.
  - c. Thesis must be of benefit and the comprehensive exams should not be a choice for public health specialties.
  - d. Paper publications, whether locally or international should be encouraged.
6. Awareness campaigns in public health at all levels, policy makers or community leaders in order to decrease the gap of knowledge and application in public health at all levels.
7. Bachelor degree is encouraged in certain specialties such as nutrition and occupational and environmental health
8. Masters in health policy and management, epidemiology and other recommended fields should be initiated.
9. Health promotion and mental health should be of the most areas of emphasis due to recent unique situation the area is getting through nowadays.

## 6.10 Recommendations for Future Research:

1. A community-based study of needs assessment in public health issues and practices is needed.
2. A study should be performed about each component of public health needs in educational programs both at bachelor and master level.
3. A study that follow up public health graduates development after graduates and discuss the programs implemented in the past 10 years outcome and effect on these graduates.
4. a study should be performed to assess the perception and attitudes of decision and policy makers for the priority of public health science among the other medical and health sciences for the development of health level in the Palestinian community.

## 6.11 Conclusion

This is the first type of studies in Palestine that could show for the first time that policy makers are not aware of public health concepts, issues and practices. This by itself at levels reflects the weakness in planning of many emerging programs at the various universities. Also, the unorganized scatted planning of such programs affected totally the role of the graduates at the various organizations. Although there was emerging specialties in public health field, but still human recourses are not enough to cover the need for developing these new fields. This research emphasis the need of better decision making in directing the various universities to have a complementary role in serving the national need of public health. A further research is needed to priorities in the area of public health, regardless of its degreed level, i.e. master, bachelor, diploma, or continuing education programs.