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Health promoting schools evidence for effectiveness workshops report

During the XVII[th] World Conference on Health Promotion and Health Education of the IUHPE, health promoting schools experts from around the world came together during two intensive, interactive workshops to examine and improve the evidence base for health promoting schools (HPS). These workshops were designed to be a first step towards improving the evidence base for HPS. Further work will need to be carried out in order to ensure that issues raised and networks developed during these two meetings are used to their full potential. It is hoped that the workshop participants will take an active and leading role in this ongoing effort. The intent of this report is to provide a springboard for further work towards a better evidence base for HPS.

As a departure from *Promotion & Education*'s normal practice of publishing only peer reviewed articles, it was felt that the publication of the report on the HPS Evidence for Effectiveness Workshops (full text available at www.iuhpe.org) provided the opportunity to give readers a flavour of the ongoing debate about the issue of evaluation of complex muti-level interventions such as HPS. Clearly what is reported here is not a systematic overview of the situation but represents the particular views and perspectives of those who were able to attend. This document also summarises the design and objectives of the workshops.

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Background

A health promoting school is one which fosters health and learning; engages health and education officials, parents, teachers, pupils, and community leaders; strives to provide a healthy environment, health services, health education, physical education, good nutrition services, social support and mental health programmes for both students and staff; implements policies and practices to support success and high self-esteem; and strives to improve the health of students, school staff, families, and community members[1].

School-based health promotion is currently being carried out across the world with varying levels of success and with varying ways of measuring, accounting for, and sharing that success. Increasing the quality of, access to, and implementation of science-based information about what works in school health promotion is important. A strong evidence base for HPS effectiveness can help practitioners in programme implementation as well as in obtaining funding for practices with a proven track record. In 1999, the IUHPE published *"The Evidence of Health Promotion Effectiveness: Shaping Public Health in a new Europe"*[2] for the European Commission, including a chapter on health promotion in schools. This document is proving to be a widely used and appreciated resource.

In light of new developments in the health promoting schools arena including the FRESH (Focusing Resources on Effective School Health) collaboration between the WHO, the World Bank, UNICEF, and UNESCO; the Dakar Framework for Action to achieve Education for all; and other factors including simply the passage of time during which new findings may have been brought to light and new programmes commenced or completed, it is useful to re-examine how effectiveness of health promotion in schools is understood, implemented, and communicated. It is also important to identify critical gaps in current knowledge and application and plan a practical strategy to contribute to significant improvements in the evidence base.

Fundamental to this effort will be revisiting the five action areas set out in the Ottawa Charter for Health Promotion as they apply to *school* health promotion: building healthy public policy; creating supportive environments; strengthening community action; developing personal skills; and reorienting health services[3]. The XVIIth World Conference on Health Promotion and Health Education, including "evidence" as one of its main themes, presented an opportunity to further examine the question of effectiveness of health promotion in a school setting and to enhance and accelerate the task of identifying and disseminating evidence-based practice for HPS.

Workshop design and objectives

Part I: Examining the evidence base for health promoting schools

As the first of two linked, interactive workshops focusing on the evidence for effectiveness of HPS, this workshop was designed to bring together experts in the field to consider the present evidence base of HPS effective practices and the present evidence base in

dissemination and active implementation of evidence-based HPS effective practices.

As groups of participants discussed these issues, led by facilitators, they were asked to organise the information into categories: dissemination, implementation, advocacy, and evaluation and measurement. Subsequently, they were to cross-reference these categories with the Ottawa Charter action areas: building healthy school policy, creating supportive environments, strengthening community action, developing personal skills, and reorienting health services. Organising the information along these lines was intended to assist in identifying *meaningful* gaps in the evidence base for HPS knowledge and implementation/dissemination. A set of matrices was to result showing a clear picture of "what we know" (the evidence base) and "what we are doing" (how the evidence base is being implemented successfully).

Part II: Identifying gaps and building a 3-year programme of work

The second of the two linked, interactive workshops focusing on the evidence for effectiveness of HPS, the aim of this workshop was to identify significant gaps in the HPS knowledge base and in current successful implementation. First, small group debates examined the relationship between HPS evidence issues and the other conference themes: ethics, advocacy, and partnership. Material from the first workshop was organised to assist in identifying meaningful gaps in the evidence base for HPS. Groups reviewed this material and identified important gaps in the evidence base across Ottawa Charter action areas. Once identified, the gaps were to be prioritised and action steps for top priority gaps developed for a three-year programme of work for IUHPE and HPS professionals globally.

Workshop proceedings

Part I: Examining the evidence base for health promoting schools

In six groups of eight or nine people, the participants discussed the criteria for evidence and effectiveness. Three of the groups focused on a research perspective and three focused on a practice perspective. After coming to agreement within their groups as to what constituted evidence for effectiveness, they began identifying successful, evidence-based practices and organising them across the Ottawa Charter action areas on the matrices.

Groups briefly shared both their criteria for effectiveness as well as their matrices with each other and these were compiled by facilitators and the workshop coordinator for use in the second workshop.

Part II: Identifying gaps and building a 3-year programme of work

Sitting in the same groups as the first workshop, the participants first discussed and debated issues surrounding evidence and the three other themes of the conference: ethics, advocacy, and partnerships. The conference coordinator and moderators then shared with the entire group the results from the first workshop: the list of criteria for evidence for effectiveness and a matrix with combined data from each group discussion. The matrix itself was revised between the two workshops in response to suggestions from the participants and facilitators and further comments were taken on its usefulness.

Breaking into groups again, participants identified gaps in the evidence base and prioritised them. If time allowed in their group discussion, they also listed action steps to address the prioritised gaps. Each group then shared the highest priority gap with the entire workshop.

Results

Evidence for effectiveness criteria

Before beginning discussion about the HPS evidence base, it was necessary for the groups to first come to agreement as to what constituted evidence for effectiveness. While the randomised controlled trial is a commonly accepted standard for science-based evidence, it was widely recognised within this group of HPS experts that other sources of evidence exist, are frequently more easily obtained, and may be more appropriate for use in school-based health promotion. Table A shows the criteria that were identified by the

Table A

Evidence for effectiveness criteria

We know that an HPS practice may be effective if....

- ...it causes positive change to occur in the direction intended in behaviour and/or organisation.
- ...school based learning outcomes are improved.
- ...the good is preserved, mapping the assets, not doing harm.
- ...it has buy-in from stakeholders when they see efficient use of resources and time, and relevance to their own needs.
- ...significant numbers of people participate and partnerships are developed.
- ...supporting testimony of people who are involved is given.
- ...teachers are satisfied, empowered and participating.
- ...there is a community response in affirmation of work where the community is seen as client, and there is a sense of accountability to community.
- ...case studies are used to demonstrate process changes.
- ...pre/post assessment information shows positive changes.
- ...controlled study data show impact.
- ...there is external recognition of the programmes, stamp of approval from "official bodies", and continued support is provided.
- ...the practice is normalized and institutionalised.
- ...it conforms to already agreed upon health promotion principles (i.e.: Ottawa Charter).

group. Each alone is not sufficient, but together these criteria can be combined to provide evidence for effectiveness. They are in no particular order, but are a start towards identifying standards for evidence for effectiveness.

Matrices

With these in mind, the groups each identified effective practices in their research or program implementation work and then attempted to organise them into the matrix along Ottawa Charter Action areas. Table B displays a combined matrix showing a sample of entries from all groups. The intention of combining these into one matrix is to see visually where the evidence base may be stronger or weaker.

Before beginning the next discussion to identify gaps, the group studied this matrix and discussed ways it could be improved. Some suggestions were:

- Don't force the Ottawa Charter into boxes, it needs to be able to cut across all areas.
- Change the left-hand column to read: "Analysis, National Planning", "Implementation", "Dissemination", "Advocacy".
- Instead of using Implementation, Evaluation & Measurement, Dissemination, and Advocacy on the vertical scale of the matrix, use the other key components of the Ottawa Charter (i.e. Foundation of pre-requisites for Health, Advocacy, Equity in resources and opportunities, Mediation between professions and social groups).
- The Ottawa Charter components of Empowerment, Participation and Equity were key to underpinning the ethical dimensions of the matrix and should try to be incorporated as well.
- Revise in other ways not specified but it needs to be re-visited to be a more useful tool.

In looking at the matrix, as completed without these changes in place yet, it is possible to see that there are some patterns in where we currently have evidence for effectiveness. For example, "Implementation", "Dissemination", and "Developing Personal Skills" have no cells completely empty. On the other hand, "Evaluation & Measurement", "Advocacy", and "Strengthening Community Action" each have two cells empty. While acknowledging that the process to fill in this matrix was far from perfect and was done hastily, this pattern may suggest areas that need to be addressed through an action plan to fill gaps in the evidence base for HPS.

Debate and discussion on conference themes and evidence

In addition to the matrix from the first workshop, participants also had their debate/discussion of conference themes as they intersected with evidence issues to incorporate into the analysis of gaps. Three discussions, each focusing on a different conference theme as it related to evidence, were held in the small groups. Notes from each are presented here:

Evidence and ethics

- Evaluation needs to be both qualitative and quantitative.
- Need to evaluate processes (including partnerships), educational outcomes, and health outcomes.
- Health outcomes should include both physical and mental health.
- Cultural sensitivity is important in data collection – e.g.: sexuality education/student surveys may not be an appropriate needs assessment in some settings.
- Anonymity is a sensitive issue, especially in qualitative and case studies.
- There is a strong presence of the medical model and schools think in these terms when looking for evidence.

Evidence and advocacy

- We have evidence to use for awareness-raising, but not *about the process* of awareness-raising or the value of advocacy.
- A paper trail of reports/agendas/minutes may serve as evidence for advocacy.
- Advocacy and networking are often seen as synonymous (e.g. Pacific HPS Network) and workshops allowed development of HPS concept and practice.
- Finland has 2 yearly summaries giving data on health issues and is provided to schools for their use.
- Local level advocacy via "mobilisation" in China.

Evidence and partnerships

- Who are the partners?
- Local: community organisations, parent groups, health professionals, school director, teachers, school staff, students, student councils, community centre.

Table B

Combined matrix of sample current evidence for HPS

	A. Building Healthy School Policy	B. Creating Supportive Environments	C. Strengthening Community Action	D. Developing Personal Skills	E. Reorienting Health Services
1. Implementation	- cross-curricular work - joint UK MoH/MoE whole school approach - smoke free school	- changing landscaping & external environment can change school milieu - school connectedness, cooperative learning -clean water, sanitation -getting head teacher support -HPS award scheme	- school programmes for community service	- professional diploma course for teachers (Hong Kong) -involve pupils, integrate pupils actions into learning	- school nurses - pre-school meals screening
2. Evaluation & Measurement	- health improvement priorities in education development plans in UK		- partnership support materials, parental and community involvement support materials - community action around nutrition education	- decision-making (tobacco)	- case study evidence from UK deaf schools
3. Dissemination	- Australia health promoting schools website, policy audit - well-being policies - Fit, Healthy, Ready to Learn (USA) -Alcohol/Tobacco/Drugs/ Nutrition programmes	- children and parent involvement		-NHS newsletters to teachers, support, materials, accreditation training, regional network meetings - SPHE partnership links MoH/MoE	- school medical teams recruitment
4. Advocacy		-school as learning organisation and workplace		- continuing improvement forums -obtaining support for teacher diploma (Hong Kong)	

- Regional: ministries of health/education, school boards, other sectors of NGOs including agriculture, academic sector, project links.
- Partnerships help implement successful projects.
- Partnerships help both sides in the relationship.
- Need to determine what different partners see as evidence.
- Must ensure coordination between partners/ integration & management.
- Use holistic approaches.
- Partners have different roles/expectations/limits: need to define purpose and not rush partnerships.
- Some are needed for sustainability.
- Some are needed as resources.
- Distinguishing between different roles can help determine resources on the ground: where it is essential, beneficial, marginal; relax with expectations.
- Measure effectiveness of partnership: empowerment, decision-making skills, competence to take action.
- Apply existing partnership models and knowledge to school-setting.
- Compare community development versus top-down approach or joint approach.
- Gather more comprehensive picture of evidence for partnerships using broader evidence for effectiveness definitions.
- Preserve identity of each partner.
- Partnerships should be school-led, but they should be horizontally linked.
- Ensure proper documentation of what has been done.
- Evaluation support is important.

Gap analysis

After discussion of evidence issues and looking at the matrix from the first workshop, the groups then moved into a discussion to identify important gaps in the evidence base. These gaps were also prioritised. Highest priority gaps are listed first below. Others are then listed and grouped by similar theme. Most gaps are phrased as questions to prompt for an answer through action steps.

Highest priority gaps:
- Matrix needs to be revised so that it can be a more useful tool.
- How can we measure ethos and environment in a school?
- We need to better understand the changing paradigm of HPS, an increasing educational focus, and build evidence around that.
- Do HPS support educational outcomes? If so, how?
- We need more evidence about partnerships: with students and general coordination between partners.
- We don't have a clear idea of existing work and evidence already available about HPS and health promotion in schools.

Other important gaps:
General evidence-related:
- What counts as "good" evidence – definition of evidence?
- What is the best way to obtain "good" evidence?
- What type of evidence is necessary at the school level?
- In identifying gaps and filling them, we need to be aware of cross-cultural differences and level of appropriateness and significance of different pieces of evidence for different cultural groups.
- The significance of each gap must be contextually related and related to the overall purposes of the research – this is an ethical decision.
- How can we get evidence into practice?

Ottawa charter action areas:
- Building healthy school policy:
  - What are indicators for impact of policy decisions?
  - How is the HPS model being "used" at the school level: are all components being adopted? How are teachers and students implementing them?
  - Are school policies based on needs assessments?
  - How do we advocate/persuade policy-makers to adopt harm-reduction programmes (HIV-prevention)?
  - How can we transfer policy-making process to the regional and local levels?

- Creating supportive environments:
  - How have categorical "entry point" approaches influenced other dimensions of school life?
  - How can the school affect peer culture and vice versa?
  - Can we measure improvements to teacher/student/parent relationships?
  - How can we advocate for policies that create supportive environments?

- Strengthening community action:
  - What is the impact of the school on its community?
  - How do the school and parents interact?
  - How does HPS strengthen community action?
  - How can we show that stakeholders have a sense of ownership in HPS evaluation and measurement in community settings?
  - What is the evidence for involving the community?
  - How can we involve communities more in advocacy?

- Developing personal skills:
  - Do we really measure skills properly (as opposed to knowledge, attitude, and behaviour)?
  - Does physical activity impact the attention span of children in school?
  - Does teaching relaxation skills have an impact on behaviour?
  - Need better evaluation of programs to develop personal skills.
  - Are learning outcomes influenced by personal skills?

- Re-orienting health services:
  - What is the value-added of the traditional school nurse in HPS?
  - What is the impact of health service changes on the rest of the school?
  - How can we advocate to re-orient health services?

Other matrix themes:
- Evaluation and measurement:
  - Need intermediate indicators of health and educational outcomes.
  - Need appropriate evaluation tools - participatory models, behavioural change.
  - How do we study informed beliefs of parents as opposed to conviction-driven hysteria?
  - Need to identify good HPS evaluation methods.

- Dissemination:
  - How do we disseminate information that gatekeepers don't want to hear?

- Advocacy:
  - How do you define and measure effectiveness of advocacy?
  - Is there a set of fundamental advocacy practices critical for success?

Table C
Workshop Evaluation

	Strongly Agree	Agree	Neither	Disagree	Strongly disagree
1. The session met the stated objectives.	25%	**56%**	13%	6%	-
2. The session met my expectations.	**44%**	31%	13%	13%	-
3. I enjoyed the session.	47%	**53%**	-	-	-
4. The work we accomplished today will be used to improve the evidence-base for HPS effectiveness.	38%	**46%**	15%	-	-
5. The materials provided were helpful in completing the tasks.	14%	**64%**	7%	14%	-
6. The moderator kept the session groups on task.	**65%**	35%	-	-	-
7. The moderator was easy to understand.	**56%**	38%	6%	-	-

Action steps

After identifying gaps, groups were given a chance to set some action steps to begin to fill these gaps. Only one group provided action steps as follows:

- Commission a university/research centre to gather existing reviews of HPS and health promotion in schools and assemble into a framework, translated into different languages, and updated periodically (annually).
- WHO should further develop HPS concept to integrate various cultural and political frameworks for HPS –this would be a process, not just an outcome – across different political/social settings.
- Develop simple evaluation tools and indicators for busy teachers and students to use especially in developing countries. WHO could disseminate.
- Commission a university/research centre to link learning outcomes/education criteria to HPS using a broad range of parameters.
- IUHPE to encourage local evaluation of HPS policies to determine if they are an integrated whole and are "outward looking".

Other gaps suggest action steps, though none others were specifically identified as such.

Evaluation comments

Seventeen evaluation forms (28%) were submitted with comments consistent with verbal comments received by the workshop coordinator and facilitators. Negative comments included: "not enough time", "matrix was confusing and hard to use", "too many people", "putting Ottawa Charter in boxes does not work", and "physical environment was difficult". Positive comments included: "diverse range of experience and backgrounds brought together", "true participation and discussion", "cooperation, trust, and understanding", "networking", "reassurance of work being done", "good group discussion", "great process", "there is a practical application of information", "great diversity of participants", "rich wisdom clearly evident in room", and "opportunity to share views of what works". Likert-scale questions were answered as shown in Table C.

Conclusions and recommendations

Despite several limitations, most conference participants had positive feedback about the workshops and many of the main objectives were achieved. Many participants found the matrix structure uncomfortable and overly limiting, but they were largely able to complete the tasks set out before them. Perhaps the most valuable aspect of the workshops was the fact that such a diverse and talented group of HPS experts were in the same room, discussing important issues. Discussion was very lively and new relationships were established between people who may not otherwise have made the connection.

Although these workshops were intended to result in a three-year action plan to improve the evidence base for HPS, that ultimate goal has not been immediately realised. Other important pieces of knowledge have emerged, however, that will help toward that goal and can also help to improve HPS practice and understanding immediately. For instance, the first discussion about what constitutes evidence for effectiveness has resulted in a better understanding of what we can use to make a case for HPS and where some strengths and weaknesses in that evidence base may lie. The list of Criteria for Evidence (Table A) can be further developed into a more meaningful tool by creating a hierarchy or evidence, showing which criteria can naturally group together to support one another, and in linking to tools and other measurement techniques to provide the evidence necessary to meet the listed criteria. Advocacy around these criteria will also be important to build consensus in HPS stakeholder circles for what evidence is "good" and "meaningful" for different groups and different cultures.

A second example of useful knowledge resulting from these two ninety-minute sessions is the notes taken during debate and discussions on conference themes and evidence for HPS. These reflections of some of the best minds in the school health promotion field are worthy of further study and will be important to consider as an action plan is put forward and new evidence is obtained and used.

The gap analysis and action steps recommended are a treasure trove of questions and insights that could keep an army of PhD candidates occupied for a decade or so. Organising, synthesising, and distilling this information into manageable pieces is the first order of business. Tackling them in turn will be a challenge for the future as will be the effort involved in updating and revising the questions as more gaps are filled and new ones identified.

ACKNOWLEDGEMENTS

The workshop coordinator wishes to recognise the invaluable assistance of the facilitators who lead the discussion in each group and contributed a great deal to the overall structure and outcome of the workshops. David Rivett, Kathy Weare, Bjarne Bruun Jensen, David Stears, Peter Paulus, and Stephan Van den Broucke lead their groups superbly and provided effective support to the workshop coordinator. Jack Jones at the WHO was also very instrumental in providing necessary funding for these workshops, including the materials distributed to all participants, and deserves much appreciation. Many others, including Spencer Hagard, Lloyd Kolbe, Paula Morgan, Maurice Mittelmark, Claire Jones, Sergio Meresman, Don Stewart, Ian Hill, Bernie Marshall, Fiona Rowe, Dru Carlsson, and Alison Goffin assisted greatly with pre-planning and development of the workshops. And, of course, the workshop participants deserve many thanks for their level of involvement and contribution to very rich discussion, patience with time and space constraints, and general good humor. It is hoped that relationships developed during these meetings will continue and result in not only an improved evidence base for HPS but also in a strong collegial experience for all involved.

The matrix proved useful to some and a barrier to process for others. The primary reason it was developed for these workshops was to ensure that discussion and planning occurred in the context of the Ottawa Charter as a guiding light for health promotion in all settings. Even if the matrix is abandoned or modified, it will still be critical to use a framework of some kind to organise and pilot the process along commonly agreed principals.

The next steps will involve developing the various elements that came out of the workshops: the criteria for effectiveness, the matrix, the gaps, and the action steps into a coherent document or set of documents that can provide a blueprint for improving the evidence base for HPS. The network of workshop participants and several others who have expressed interest in becoming involved will be well suited to this task.

References

1 -World Health Organization (1997) ***Promoting Health Through Schools: WHO's Global School Health Initiative.*** World Health Organization, Geneva, Switzerland.

2 - International Union for Health Promotion and Education (1999) ***The Evidence of Health Promotion Effectiveness: Shaping the New Public Health of Europe, A Report for the European Commission,*** Jouve Composition & Impression: Paris, France.

3 - World Health Organization (1986) ***Ottawa Charter for Health Promotion (WHO/HPR/HEP/95.1),*** World Health Organization, Geneva, Switzerland.

People's corner

Congratulations to:

Spencer Hagard, who has been named Head of the Health Promotion Research Unit at the London School of Hygiene and Tropical Medicine.

Marilyn Rice, who is now serving as the Regional Adviser in Health Communications, Healthy Municipalities and Communities at PAHO/WHO in the Division of Health Promotion and Protection for the Family Health and Population Program in Washington D.C.

Retired:

After 30 years of dedicated federal service, **Florence B. Fiori,** Dr. P.H., Deputy Associate Administrator, Maternal and Child Health Bureau, retired from the Health Resources and Services Administration in January 2002.

Resigned:

After twenty-six years of service in the field of public health, **Jeffrey Koplan,** M.D. , M.P.H., has resigned from his position as the Director of the US Centers for Disease Control and Prevention. The IUHPE President has sent Dr. Koplan a letter of thanks for his contributions to health promotion and recognising his support of the development of global health over the years.