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Staff experiences with strategic implementation of clinical health promotion: A nested qualitative study in the WHO-HPH Recognition Process RCT

Jeff Kirk Svane[1], Ingrid Egerod[2] and Hanne Tønnesen[1,3]

Abstract

Objectives: Health promotion is on the global agenda. The risks targeted include smoking, hazardous alcohol consumption, nutrition and insufficient physical activity. Implementation of clinical health promotion, however, remains a major challenge. While several processes, models and frameworks for strategic implementation exist, very few have been tested in randomized designs. Testing a strategic implementation process for clinical health promotion was only recently attempted via a randomized clinical trial on the World Health Organization Health Promotion Hospitals Recognition Process. The randomized clinical trial showed that the process improved central parts of implementation. To complement these findings, this nested qualitative study aimed to explore experiences and perceptions of staff and managers, who had completed the process, and generate hypotheses for improvements.

Methods: We interviewed a purposeful sample of 45 key informants from four countries, who worked at clinical departments and had undertaken the World Health Organization Health Promotion Hospitals implementation process. The informants included 14 managers, 14 medical doctors, 13 nurses and 4 other clinical staff. Interview transcripts were analyzed using qualitative content analysis and an inductive approach to coding and categorization supported by QSR NVivo.

Results: The informants' experiences and perceptions centered around four global themes concerning (1) awareness, cultural re-orientation and integration; (2) learnings; (3) normalization and legitimacy and (4) a more evidence-based, structured and systematic approach to clinical health promotion. Informants were positive toward the implementation process, although it was sometimes challenging. The suggested improvements to increase acceptability related to the patient survey, time consumption, translation, tailoring to local circumstances and in-advance training.

Conclusions: Managers and staff were positive toward the World Health Organization Health Promotion Hospitals process, which was perceived to bring about positive changes and learnings. The findings also suggest that the implementation process may be improved by minor adjustments to process elements and design. It is our recommendation to use the process in clinical departments to further implementation of clinical health promotion.

Keywords

Implementation, clinical health promotion, health promoting hospitals, healthcare staff, quality improvement

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Introduction

Health promotion is on the global agenda,[1] both at population level and in specific settings such as workplaces,[2,3] cities,[4] schools[5] or healthcare organizations.[6] The risks targeted include smoking, hazardous alcohol consumption as well as nutrition and insufficient physical activity—issues which are central to reducing the global burden of non-communicable diseases.[7] In all settings, the need for health promotion is significant—not least among patients in healthcare organizations.[8]

Targeting quality improvement in the field of hospital-based health promotion or clinical health promotion (CHP),[9]

[1]WHO Collaborating Center (WHO-CC)/Clinical Health Promotion Center, Bispebjerg and Frederiksberg Hospital, Copenhagen University Hospital, Frederiksberg, Denmark
[2]Intensive Care Unit, University of Copenhagen, Rigshospitalet, Copenhagen, Denmark
[3]Clinical Health Promotion Centre, Department of Health Sciences, Lund University, Lund, Sweden

Corresponding author:
Jeff Kirk Svane, WHO Collaborating Center (WHO-CC)/Clinical Health Promotion Center, Bispebjerg and Frederiksberg Hospital, Copenhagen University Hospital, Nordre Fasanvej 57, Build. 14, Entr. 5, 2nd Fl., 2000 Frederiksberg, Denmark.
Email: Jeff.Kirk.Svane@RegionH.dk

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the World Health Organization (WHO) has developed and validated standards and indicators.[10–12] In addition, the last few decades have shown a rise in randomized studies providing high-level evidence on the short-term benefits of CHP within the healthcare settings themselves. Specifically, the intensive types of CHP interventions have been shown to significantly improve treatment outcomes and patient safety in a matter of weeks.[13–16] The WHO standards and indicators for CHP are widely used in many countries around the world—not least among the members of the WHO's International Network of Health Promoting Hospitals & Health Services (HPH), which represents about 700 hospitals from all continents.[6]

Systematic and widespread implementation of the evidence for CHP, however, remains a major challenge.[17–20] The challenges related to implementation of evidence in healthcare are not unique to CHP. Rather implementation is a general problem across all aspects of healthcare.[21–23] Over the years, more than 60 strategic implementation and dissemination processes, models and frameworks have been developed to further integration of evidence into practice and thus improve healthcare quality.[24] These span an array of processes and frameworks, but the effects of these initiatives on clinical outcomes are scantly investigated in randomized designs.[25,26] Testing the effect of the WHO standards and indicators for CHP in the form of a strategic quality improvement process was only recently attempted. This testing was done in an eight-country multi-center randomized clinical trial (RCT) with 36 clinical hospital departments, entitled "WHO-HPH Recognition Process".[17,20]

The WHO-HPH recognition process

The WHO-HPH Recognition Process RCT tested the effect of using the WHO standards and indicators in a fast-track strategic implementation process, introduced at the level of the clinical department over the course of 1 year. The effects studied were health gains of patients and staff, improvements in documentation of lifestyle risks, improvements in delivery of related CHP services to patients in need of them and improvements in compliance with the WHO standards and indicators.[17]

The RCT was designed with the hospital departments as the unit of randomization and analysis and departments were randomly allocated to either the strategic implementation process or to continuation of their own usual implementation routines. In addition to the WHO standards and indicators, the RCT's proposed strategic implementation process also relied on validated CHP documentation models,[27,28] drew on more theoretical elements from implementation science[23,25,26,29,30] and on general quality improvement tools, such as the plan–do–check–act (PDCA) cycle, quality plans, surveys, medical record audits and issuing of recognition certificates.

The data collection in the RCT covered patient, staff and clinical department levels. The health status of patients and staff was assessed via Short Form 36 version 2 (SF36v2) health surveys.[31,32] Patient lifestyle risks and related delivery of CHP services were assessed via medical record audits using the CHP documentation models.[27,28] Department-level performance was assessed with the WHO standards.[10]

The performance of the departments regarding the WHO standards was recognized at the finalization of the 1 year implementation by a certificate (91%−100% standards compliance was gold level). The RCT did not find significant effect on health gains of patients or staff, but it did show that the strategic implementation process itself improved documentation of lifestyle risks, delivery of related CHP services as well as compliance with the WHO standards.[20]

Aim

To complement the RCT's findings, this nested qualitative study aimed to explore experiences and perceptions of staff and managers, who had completed the WHO-HPH Recognition Process, and to help generate hypotheses for potential improvements to the process.

Methods

Qualitative methods are needed to answer how participants experience a given intervention and how it works.[33] In order to explore how staff experienced and perceived the WHO-HPH process, and how the process might be improved in the future, we used an interpretive data synthesis approach[34-36] of semi-structured in-depth key-informant interviews[37,38] with staff and managers as our data source. The key-informant approach was limited in the sense that it was non-ethnographic; not looking for any cultural understanding per se, but rather looking for "informants who might be expected to have specialized information on particular topics".[39] The study was conducted and reported according to the consolidated criteria for reporting qualitative studies (COREQ) framework.[40]

Sampling strategy and ethical approval

A purposeful sample[41] of three to four informants from the WHO-HPH Recognition Process RCT's intervention-group department were selected. To ensure transferability, informants included health professionals from varying disciplines, functions and experiences and from a variety of hospital and department types (Table 1).

The resulting sample of informants was large, due to the number of clinical departments in the RCT's intervention group. No department in the group was skipped, but for logistic reasons no informants were interviewed at intervention-group departments that had not yet had their concluding site-visit for the RCT at the time of reporting for this qualitative study.

Permission to conduct the interviews was agreed with management of each hospital and each department. Informants received oral and written information about the

Table 1. Characteristics of 45 staff and manager informants and their 14 intervention-group clinical departments in 4 countries.

		Taiwan (n = 27)	Czech Republic (n = 11)	Japan (n = 3)	Malaysia (n = 4)
Function	Manager/staff	9/18	3/8	1/2	1/3
Sex	Women/men	14/13	5/6	1/2	4/0
Years employed	(in department) <5/5–15/>15	6/13/8	1/6/4	0/1/2	1/3/0
Hospital type	Community/teaching general/ specialized/university	3/15/3/6	8/3/0/0	0/3/0/0	0/4/0/0
Department specialty	Medicine/surgery	21/6	7/4	3/0	4/0
Ownership	Public/private non-profit/ private for-profit	15/9/3	4/3/4	0/3/0	0/4/0
Catchment	Urban/rural/mixed	15/6/6	0/0/11	3/0/0	4/0/0
Hospital beds	<200/200–399/400–599/>599	6/0/3/18	0/8/0/3	0/0/3/0	0/4/0/0

aim of the qualitative study. Informants were informed that participation was voluntary and refusal would not adversely affect them. Informed oral consent was obtained from each informant. No person-identifiable data were recorded, and each interview was anonymized at the source. In the pre-interview briefing, informants were encouraged to be open and honest, and it was emphasized that no right/wrong answers existed but that the focus was entirely to learn from them, get their experiences and insights.

The study was reviewed by the Internal Review Board of Bispebjerg Hospital in Copenhagen (International studies) and by the local review boards of each participating hospital. The Danish Data Protection Agency approved the study (2012-41-0152/2017-41-5029).

Participants and setting

The interviews were conducted between August 2014 and March 2016 during follow-up site-visits to the departments that had completed the 1-year intervention of the RCT. Each RCT's intervention-group departments nominated three to four informants from among their staff, namely, one manager, one doctor, one nurse and one other staff member (such as a dietician or a physiotherapist) where applicable for the department type or specialty. In total, 45 healthcare professionals were interviewed (24 women and 21 men). The 45 informants included 14 managers, 14 medical doctors, 13 nurses and 4 other clinical staff (dieticians, nutritionists and physiotherapists). The informants were from 14 hospitals in four countries: Taiwan, Czech Republic, Malaysia and Japan.

All but one informant had first-hand knowledge and experience with the WHO-HPH Recognition Process implementation, having been directly involved. No informants declined to participate and no informants dropped out. The characteristics of informants and their departments are shown in Table 1.

The interview length average was 15 minutes. All interviews, except for the Malaysian informants, were conducted face-to-face on location in the clinical departments in connection with the RCT's finalizing site-visit and audit. Malaysian interviews were conducted online, remotely via Skype.

For the interviews with informants who did not speak English, a translator was present in the room to provide simultaneous translation. For some interviews, and owing to cultural concerns or situational reasons, the interviewer was unable to obtain a closed-door interview environment, meaning that others than the interviewer, informant and translator were present in the room. In most cases, these non-participating additional individuals were the informant's manager and/or the department head, a colleague of the informant and/or a representative from the national/regional HPH Network.

Data collection, analysis and validation

The first author, J.K.S., conducted all interviews. As a PhD student on the project, J.K.S. was also responsible for the international coordination of the WHO-HPH Process RCT and thus familiar with many of the informants in advance. J.K.S. had a master's degree in communication, and he had previous experience with qualitative studies as well as >5 years of work experience in the area of health promotion in hospitals. These facts were known by informants. To further confirmability, and since the aim was both descriptive and interpretive,[42,43] interviewer preconceptions and assumptions were investigated by a researcher not otherwise involved in the study, by way of an interview with the interviewer ahead of the study and all interviewing.

To further credibility,[44] the key-informant interviews conducted were semi-structured and dialogical,[45] and the interview guide contained open-ended questions that were closely tied to the elements of the implementation process itself, in order to let the informants "teach the interviewer",[37] in as much detail as possible, what they knew about their real-life experiences. The guide had not been validated in advance. Broad questions were asked to obtain details on the lived experience of informants, and follow-up questions were asked to pursue detail. The interviewer rephrased the responses for data validation during the interviews.

Interviews commenced with a briefing where the focus was re-stated and consent was orally obtained. Each interview started with the broad introductory question, "What did you think of the project before it commenced, when you first heard about it?" Interviews ended with a de-briefing and with assurance from informants that they had no further comments they wished to voice or anything important on their mind that had not been touched upon in the interview. Interviews ended with the broad question: "Is there anything else that we haven't touched upon or something further you think we should discuss?" Field notes were written after each interview.

The interviews were audio recorded and transcribed verbatim by J.K.S. QSR NVivo version 10 was used for transcription, transcript management, classification matrix, field-notes management and all analyses. The classification matrix included yes/no answers and basic informant characteristics. In the analysis, transcripts were free-coded and then iteratively interpreted and analyzed until themes emerged. Figure 1 shows the initial free-coding stage and the number of sources and references, providing an overview of the importance of each topic.

To further dependability, investigator triangulation in the author group was used to ensure that initial codes and final themes were continuously validated in the interview transcripts.[46] Continuous inquiry discussions in the research group furthered thoroughness, consistency and repeatability of the research process and data analyses.

Results

Interviews were conducted with 45 healthcare professionals; 31% were managers, 31% were medical doctors, 29% were nurses and 9% other clinical staff such as dieticians or physiotherapists. About half (53%) of the informants were women. The informants were from 14 hospitals in four countries: Taiwan, Czech Republic, Malaysia and Japan. All worked at intervention-group clinical hospital departments, which had undertaken the 1-year implementation of the WHO-HPH Recognition Process (Table 1).

Informants' perceptions of and experiences with the implementation process

The informants' perceptions of and experiences with the implementation of the WHO-HPH Recognition Process revolved around four global themes. The first theme concerned awareness, cultural re-orientation, integration of CHP into daily practice as well as optimism related to CHP. This is presented below with the title "It reminded us of health promotion." The second theme concerned learnings, competences and understanding of CHP. This is presented below with the title "The whole process was educational." The third theme concerned normalization and legitimacy of CHP as well as benefits and barriers related to the process. This is presented with the title "CHP has become the norm." The fourth theme concerned improvements in structure, documentation and working practices as well as a more evidence-based and systematic approach to CHP. This is presented with the title "Now we have data to show them."

Global theme 1: "it reminded us of health promotion." The first theme concerned awareness of CHP, cultural re-orientation toward CHP and integration of CHP into daily practice. It also concerned a re-kindled optimism regarding the potential results of CHP work.

The general raise in awareness of CHP importance, the cultural re-orientation and the integration of CHP into daily practice is illustrated by these quotes from informants:

> *Before we came into contact with this (the WHO-HPH process)—we were just dealing with patients before - and after we joined this, we found that actually we had abandoned something here. It kind of reminded us a lot of health promotion.* (Manager, Taiwan)

> *We were probably starting to forget that kind of view (the view of CHP), but by working with this project, people were reminded of what they have to do.* (Manager, Japan)

> *Over the months and gradually with a year now, I think almost all of our staff have habitualized this (CHP) into the clinical practice*. (Doctor, Taiwan)

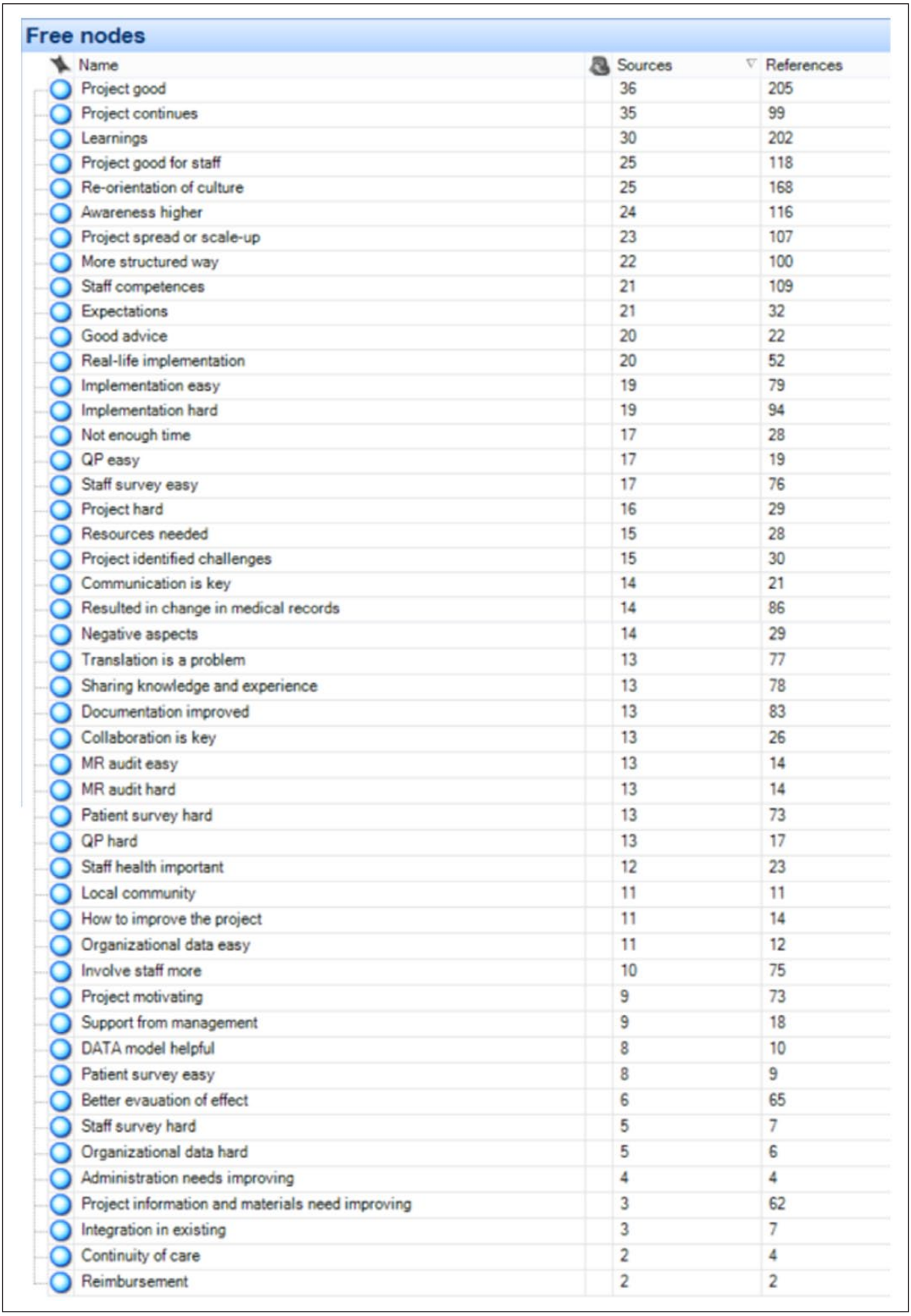
Regarding the re-kindled optimism concerning CHP, informants talked about increases in dialogue about CHP and about what they think could viably be obtained through CHP in future:

> *[…] over the year, I think we have […] recognized that, uhm, augmenting the health awareness of our patients and also our staff does translate into better clinical outcomes. It may be not that significant at first, but I think, at least we believe now that if we continue to do this, we will actually make a difference*. (Doctor, Taiwan)

> *We use this model, and I think, it is the same for any hospital. But especially for this hospital, we know that, if we do this, we can improve.* (Manager, Japan)

In summary, this theme shows that informants perceive the process to have brought about greater awareness of CHP within their departments. Informants felt the process had made CHP a more prominent part of, or habit in, their daily clinical practice. This highlights a perceived cultural re-orientation of the departments toward CHP. The theme also highlights a rekindled optimism regarding the potential results of implementing patient-centered CHP altogether.

Global theme 2: "The whole process was educational." The second theme concerned learnings on CHP. These learnings were perceived to be both at a specific level, in terms of competences and skills related to CHP, but also at a more overall level.



Free nodes

Name	Sources	References
Project good	36	205
Project continues	35	99
Learnings	30	202
Project good for staff	25	118
Re-orientation of culture	25	168
Awareness higher	24	116
Project spread or scale-up	23	107
More structured way	22	100
Staff competences	21	109
Expectations	21	32
Good advice	20	22
Real-life implementation	20	52
Implementation easy	19	79
Implementation hard	19	94
Not enough time	17	28
QP easy	17	19
Staff survey easy	17	76
Project hard	16	29
Resources needed	15	28
Project identified challenges	15	30
Communication is key	14	21
Resulted in change in medical records	14	86
Negative aspects	14	29
Translation is a problem	13	77
Sharing knowledge and experience	13	78
Documentation improved	13	83
Collaboration is key	13	26
MR audit easy	13	14
MR audit hard	13	14
Patient survey hard	13	73
QP hard	13	17
Staff health important	12	23
Local community	11	11
How to improve the project	11	14
Organizational data easy	11	12
Involve staff more	10	75
Project motivating	9	73
Support from management	9	18
DATA model helpful	8	10
Patient survey easy	8	9
Better evauation of effect	6	65
Staff survey hard	5	7
Organizational data hard	5	6
Administration needs improving	4	4
Project information and materials need improving	3	62
Integration in existing	3	7
Continuity of care	2	4
Reimbursement	2	2

Figure 1. Free-coding in QSR NVivo.

Regarding the specific learnings, informants often felt that they had acquired specific new skills related to CHP practice; related to project management, communication and execution in clinical settings; related to role modeling and related to collaboration around CHP. This is illustrated by the following quotes:

> *We began to say, okay; when we do health promotion, there is a process of data collection […] you look at the results, there is a way to analyze, and you need to see, if there is room for improvement. So I think, the whole process was educational.* (Doctor, Malaysia)

> *(Personally, I) learned how to communicate with the patients and make them listen*. (Nurse, Czech Republic)

> *We learned […] about the weight, ehm, weight control skills, nutrition consultation among the patients, exercise program […]*. (Doctor, Taiwan)

Regarding the more overall learnings on CHP, informants talked about how the process increased understanding of CHP and its importance in a broader sense:

> *I think, I have gained more understanding of HPH […]*. (Manager, Japan)

> *(the process) is a more structured way to promoting health than before, so that's what I learned*. (Nurse, Malaysia)

> *Through this project, we learned that working with our patients on their individual lifestyles was very important […] so now we know, we have to do it"*. (Nurse, Japan)

In summary, this theme shows that informants felt that the process had resulted in learnings related to CHP, both at individual and group levels among staff in the departments. The learnings that took place were perceived to be both specific, related to concrete skill and CHP competences, but also more general in terms of greater understanding of CHP and the evidence to support its integration in clinical settings.

Global theme 3:"CHP has become the norm." The third theme concerned normalization and legitimacy of CHP work as well as benefits that resulted from the process and barriers to implementation encountered along the way.

Regarding normalization and legitimacy, informants talked about how CHP ceased being something extra or an add-on service and instead became communicated and recognized broadly as a new "norm" and thus a natural, legitimate part of clinical practice:

> *[…] we just continue (the WHO-HPH process), because it (CHP) has become the norm, so we will continue.* (Nurse, Taiwan)

> *[…] We have tried for several years to find and open some prevention programs, and it was very difficult […] (now we are) supported from our management […] we have built up the (CHP) program and it has helped us a lot*. (Manager, Czech Republic)

> *Basically the model (the WHO-HPH process) has been built in, so we just do it*. (Doctor, Taiwan)

> *I think that the habit will not change […] I will keep, keep on this project, keep on this method […].* (Manager, Taiwan)

Concerning the implementation of the process, informants talked about the benefits that they perceived to have resulted from it:

> *(Now) we have the ambulatory for smokers that want to stop with the habit, so this is the one thing and the biggest (change). That is what I think*. (Manager, Czech Republic)

> *It is a bonus for the patients, because the hospital is now paying attention to their issues in health, especially in the Joint Centre […] overweight is a heavy burden on their (the patients') joints. So for patients this is a good development.* (Nurse, Taiwan)

> *Through these programs, I have seen that some of the staff they have changed their lifestyles. Especially, I have seen doctors climbing stairs, you know, during lunchtime*. (Nurse, Malaysia)

> *[…] the postoperative recovery actually improved […] the number of days in bed and the exercise afterwards has been improved […] this helps in their (the patients') post-operative recovery*. (Doctor, Taiwan)

Informants also, but to a lesser degree, talked about the barriers to implementation of the process, which they had encountered. These revolved mainly around professional habits, patient compliance and availability of time and personnel:

> *At first it was not easy, because ehm, getting so many doctors, especially those had been practicing for a long time, to change their habits is not an easy thing*. (Doctor, Taiwan)

> *(The) hard parts (of the WHO-HPH process were) to try to tell our patients to do, what they promised. But sometimes they promised something, but by the time ... the reality is different*. (Doctor, Czech Republic)

> *It is difficult for us to find the time […] communicating (about CHP) with the patients*. (Manager, Japan)

> *There was still some difficulties to the actually practice, because we had no fixed personnel to work on this*. (Doctor, Taiwan)

In summary, this theme shows how the informants' experienced normalization and increased legitimacy of CHP work as a result of the process. CHP went from being viewed as an extra add-on service to being regarded broadly in the departments as a legitimate, core part of the clinical work—the new

"norm." The theme also shows, what informants perceived to be, the benefits of and barriers to implementation of the process. The benefits included structural improvements, more holistic care, patient and staff lifestyle improvements and improvements to patient outcomes. The barriers included changing old professional habits, assuring patient compliance and finding the needed time and personnel resources.

Global theme 4:"Now we have data to show them." The fourth theme concerned how the WHO-HPH Recognition Process brought about improvements in structure, documentation and working practices. It shows a perceived shift toward a more evidence-based and systematic approach to CHP:

> *We are not just giving testimony anymore. We've got research […] So with this kind of process, this way of doing things, collecting data, it also gives us more power. Now we have data to show them*. (Manager, Malaysia)

> *People […] work, and we have scientific data, and then moving from it*. (Manager, Taiwan)

> *I think was meaningful […] through this HPH recognition project, we found many challenges that we should work on*. (Manager, Japan)

> *It (the WHO-HPH process) makes sense because […] it is actually making us better, you know, uhm in a way, uhm of documenting patients in a structured way […]*. (Nurse, Malaysia)

Practically, these changes and improvements often related to improved documentation of lifestyle risks in the medical records and also to more systematic delivery of services to the patients in need of them:

> *Previously we did not have this kind of system, so maybe they (the staff) asked (patients about lifestyle), but they did not record it.* (Manager, Taiwan)

> *The change that I noticed, for instance, was the medical records system. (after the process) there was a corner that I should write in with health promotion*. (Doctor, Japan)

> *(The department is) better now. (We have) automatic patient education about smoking cessation*. (Nurse, Czech Republic)

In summary, this theme shows that the process was perceived to result in better structure, more comprehensive documentation of lifestyle risks, more systematic CHP service provision and better working practices. Generally, the informants felt that their departments had moved toward a more evidence-based and research-oriented approach to CHP—a development which was in turn seen as enabling, since it helped informants justify CHP work more easily to top-management and others by way of more compelling data on the effect of CHP.

Suggested improvements to the implementation process

Informants generally expressed positive attitudes to the WHO-HPH Recognition Process. Almost all informants wanted to be interviewed and share their experiences. Often, they saw the interviews as a natural part of or debriefing to the process. Out of 45 informants, 35 (78%) said they felt their department had changed as a result of the process, and 36 (80%) said they felt their department had gained from it. Similarly, 34 (76%) explicitly expressed a wish to continue working with the process, or in the way the process introduced, after the research project itself was finalized (Table 2).

The implementation process was, however, to some degree, perceived as challenging. Of the 45 informants, 12 (27%) said planning was easy and 8 (18%) that it was hard. Similarly, 14 (31%) said implementation was easy and 12 (27%) that it was hard (Table 2). The project challenges were perceived as greater to begin with but then easier later on:

> *In the beginning (it was challenging), but after our team has been integrated and built up, and the management has been formed, then it is okay*. (Nurse, Taiwan)

> *The first time (collecting data) it wasn't easy. So the first round was pretty rough, but after we understood the key to it, then it became easier to do*. (Dietician, Taiwan)

> *It was problematic in the beginning […] then once that stage has passed, then finally all the work, follow up, all the work afterwards, became much much easier.* (Nurse, Taiwan)

To the specific question "Do you have any recommendations for improving the project?" and elsewhere in the interviews, informants provided ideas to make the process more acceptable and less challenging. The suggestions related to the patient survey, time consumption, translation, tailoring to fit local circumstances and more in-advance training.

Patient survey

The patient survey was often handled by nursing staff, and it was often perceived as the hardest part of the process. The collection of patient data was reported to be the most time-consuming element of the process and something which often required extra efforts like making several phone calls and supporting patients to fill in questionnaires. Of the 45 informants, 27% reported that the patient surveying was challenging:

> *(The patient survey was) not very easy. (It was a) long survey*. (Nurse, Taiwan)

> *(Surveyed patients were) confused sometimes. Some patients are difficult*. (Nurse, Czech Republic)

Table 2. Answers from 45 staff and manager informants (semi-structured in-depth interviews) from 14 intervention-group clinical departments in four countries.

		Taiwan (n = 27)	Czech Republic (n = 11)	Japan (n = 3)	Malaysia (n = 4)
Aware of HP policy	Yes	27	11	3	4
Project made sense	Yes	24	9	1	3
Patient survey was	Easy/Difficult/?*	4/6/17	2/2/7	1/0/2	0/4/0
Staff survey was	Easy/Difficult/?*	10/1/16	3/0/8	0/2/1	4/0/0
MR audit was	Easy/Difficult/?*	8/7/12	2/1/8	1/0/2	1/1/2
Organizational data form** were	Easy/Difficult/?*	8/2/17	1/0/10	0/0/3	0/2/2
Quality plan was	Easy/Difficult/?*	9/6/12	2/1/8	0/0/3	1/1/2
Project implementation was	Easy/Difficult/?*	12/7/8	2/2/7	0/1/2	0/2/2
Process resulted in change in department	Yes	22	7	2	4
Department gained	Yes	22	9	1	4
Will continue the quality improvement work	Yes	26	2	2	4

?**Not applicable/relevant, don't know or unable to answer.*
***Organizational data form = self-assessment according to the five WHO Standards for health promotion in hospitals and the altogether 40 measurable elements contained.

(The patient survey was difficult) because of the number of questions and the amount of time it required for the interviews. (Doctor, Taiwan)

(The patient survey was) not easy, actually. We needed to go to every department and explain it to the staff and the supervisor […]. (Nurse, Malaysia)

Time consumption

Informants often reported that finding time for CHP, lifestyle risk documentation and service provision was a challenge:

There is not so much time for (CHP) information, and we have posters and some presentations for the patients, because we don't have the time. (Physiotherapist, Czech Republic)

We spent quite long time (on the WHO-HPH Process). (Doctor, Taiwan)

[..] many people said that there are so many questions […] So if the questions were more concentrated, I think it would be easier. (Manager, Japan)

Translation and tailoring to local circumstance

Informants also reported that translation and tailoring to local circumstances were challenging:

The difficult part was the translation from the original. We had to put it into Japanese […]. (Manager, Japan)

[…] It was quite hard, because […] there was a lot of debate of the definition on some of the questions, when we started […] We spend some time getting things clear, about what was actually asked […]. (Manager, Taiwan)

There was some questions in the questionnaire that were not "fittable" with our culture […]. (Doctor, Malaysia)

I think that because it is an international project, language is actually a barrier to it […]. (Nurse, Taiwan)

More in-advance training

Informants also reported that having more training seminars in advance of the process would have helped and made the process easier:

[…] when the department joins (the WHO-HPH Process) they really need some guidance, or maybe by giving some advice and examples […] so they can have a brief idea as to how to go about it. (Nutritionist, Malaysia)

[It is] important to know the principles of the whole project, to understand it, knowing it better beforehand. (Doctor, Czech Republic)

[…] this is a learning curve, and so you do encounter challenges, so I think that a proper training (in advance) would be better to go through, so you have a better idea how to run this project. (Nurse, Malaysia)

In summary, the informants suggested improvements to the process by adjustments to the patient survey, time consumption, translation, tailoring to fit local circumstances and in-advance training. The surveying of patients was the most challenging part of the data collection, and it could be improved by condensing and shortening the questionnaire. While patient-centered CHP does take time, the overall time consumption related to the process might be reduced by condensing the data collection more, if at all possible. Enhanced

Table 3. Answers from 43 patients (brief interviews) admitted to the 14 intervention-group clinical departments in four countries.

		Taiwan (n = 27)	Czech Republic (n = 10)	Japan (n = 3)	Malaysia (n = 3)
Aware of HP policy	Yes	26	8	3	3
Satisfaction*	Excellent/very good/ good/fair/poor	10/17/0/0/0	8/2/0/0/0	1/2/0/0/0	1/1/1/0/0
Asked about risks**	Yes	27	9	3	3
Informed re. CHP***	Yes	26	8	3	3
Want CHP****	Yes	26	8	3	3

CHP: clinical health promotion.
**Satisfaction with health promotion information received at the department.*
***The department asked about lifestyle risks.*
****The department informed about supportive CHP services.*
*****In general, I want the department's support regarding lifestyle changes.*

tailoring to local circumstance and improved translation processes would also help avoid possible confusion and resulting extra time consumption. Finally, and even though a number of staff from all departments had taken part in training activities directly related to the process, establishment of more or better training seminars in advance of the process, possibly involving even more staff, might also help.

Discussion

The WHO-HPH Recognition Process was well received by informants. Generally, informants were positive toward the process, felt it was worthwhile and wanted to continue working with it, or in the way it prescribed. Informants reported that the process increased awareness and furthered integration of CHP; brought about learnings, competences and understanding; normalized and legitimized practices and also that it brought about a more evidence-based, structured and systematic approach. Improvements suggested included changes to the patient survey, reduced time consumption, translation, tailoring to local circumstances and more in-advance training.

The experiences and perceptions of our informants contrast some previous findings in the area of accreditation processes, which to some degree resemble parts of the WHO-HPH process—such as the collection of data, the external auditing/inspection and the issuing of performance-based certificates. In contrast to our findings, studies on accreditation have shown that accreditation processes may be poorly received by staff, by, for instance, increasing their stress level,[47] or have no effect on staff perception, for instance, in relation to job satisfaction.[48] Our findings, however, do correspond with other previous findings that showed positive effects on staff perception of clinical quality.[49] Additionally, our results highlight staff appreciation of a structured process, learning and added managerial focus on evidence-based practices. This corresponds with other recent findings, highlighting the promise of implementation strategies that incorporate these elements.[50]

The overall positive experiences and perceptions of staff, and their feeling that the WHO-HPH process increased awareness and integration of CHP, also correspond with data from their own patients, who in brief interviews during site-visits reported to be aware of CHP, satisfied with CHP, to have been asked about lifestyle risks and informed of CHP services (see Table 3).

That the informants in our study called for changes to the patient surveying of the WHO-HPH process complements the results from the RCT, where no health effect was found. It is possible that surveying the individual patients that actually received the CHP services, instead of surveying those simply admitted to the department at the time of measuring, would have been a better approach both in terms of capturing a potential health effect,[20] and it is possible that this would in turn also have made the actual surveying process easier and less time-consuming. However, it is interesting that surveying/talking to the patients was perceived by staff to be among the more challenging aspects of the process—especially since patients so univocally wanted the departments to support them by way of CHP (Table 3).

Limitations

This study has a number of limitations. All informants were from departments in HPH member hospitals that had undertaken the WHO-HPH Recognition Process. In this way, our informants may represent a motivated group, and results may be quite different outside HPH hospital settings.

The first-hand experiences with the project, which informants generally had, increase the trustworthiness of the study. The inclusion of informants from several countries and cultures is a strength, as it may broaden representativeness, but it is also a limitation, since it meant greater variability. In terms of validity, the year that passed from process start to interviews may have promoted recall bias. This might have caused under-reporting of problems and negative aspects of the process. Also, the interview guide had not been validated in advance, which is a further limitation.

The overall positive attitudes of informants may be connected to four general limiting factors: power, situation, culture and language/translation. Regarding power, the interviewer was part of the site-visit auditor group—which came to the hospital departments, validated their data and scored them with certificates. Regarding situation, a closed-door interview situation was not always obtained, so sometimes managers, HPH Network officials and others were in the room during interviews. Regarding culture, it is well described that complex face-keeping practices and politeness-related social codes exist, not least in Asian cultures, and that these have important ramifications on all types of communication,[51,52] with research interviews not likely to be any exception. And finally, regarding language/translation, none of the informants were native English speakers and field-notes ascertain that translation could at times be a challenge. These four general limiting factors may have added to an asymmetrical power relationship between interviewer and informants, have reduced the likelihood of negative utterances, and they may altogether have impacted the free, honest and open dialogue, which is often envisaged as the ideal interview situation.[45] Realistically, however, a research interview is probably never power free, given its nature as a purpose-built type of conversation set up to produce useful data to answer, in the researcher's eyes, useful data to answer clear research objectives.[53] On this basis, the four general limiting factors in this study may be regarded, simply, as what was possible. The four general limiting factors have been presented to make resulting limitations transparent and to allow readers to evaluate potential effects[53] on findings.

The large sample of informants interviewed in this study could also give rise to ethical concerns, since it might be interpreted as excess data collection and thus unnecessary use of informants' time. Conversely, having a large sample could also be regarded as legitimate safeguarding against potential language/culture and ability barriers to adequate communication, articulating, expressing and reflecting on experiences and opinions,[37] especially since it would have been costly to have had to return back to hospitals in other continents, in case of lacking data. Furthermore, the interviews were very rarely regarded as an inconvenience by informants, who rather viewed the interviews as a positive part of or de-briefing to the process itself, thus reducing potential ethical concerns related to excess data collection.

Conclusion

Implementation of the WHO-HPH Recognition Process was well received by staff and managers. The process was perceived to raise awareness, further integration and foster cultural re-orientation toward CHP. It was also perceived to bring about learnings, to normalize and legitimize CHP practices and facilitate a shift in departments toward a more evidence-based, structured and systematic approach to CHP. Our results provide new insight into how staff perceive and experience the WHO-HPH Recognition Process, and they also provide qualified suggestions to how the processes might be improved upon in future by way of minor adjustments to project aspects and elements like the patient survey, time consumption, translation, tailoring to local circumstances as well as additional in-advance training. We recommend use of the process in clinical departments to help further implementation of CHP.

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Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethics approval

The study was reviewed by the Internal Review Board of Bispebjerg Hospital in Copenhagen (International studies) and by the local review boards of each participating hospital. The Danish Data Protection Agency approved the study (2012-41-0152/2017-41-5029).

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Informed consent

Verbal informed consent was obtained from all subjects before the study and written informed consent was obtained from legally authorized representatives before the study.

Trial registration

This was a nested qualitative study in an RCT. The RCT was registered at ClinicalTrials.gov: NCT01563575.

ORCID iD

Jeff Kirk Svane https://orcid.org/0000-0002-7816-211X

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