An Analysis of the World Café Approach to Exploring a Model of a Multidisciplinary Research Center: A Case Study from Siriraj Integrated Perioperative Geriatric Excellent Research Center

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Abstract

Older surgical patients care demands for multidisciplinary research to deepen the understanding of the needs of the aged. This study aimed to develop a strategic plan for the Perioperative Geriatric Excellent Research Center. The World Café methodology was employed to facilitate constructive dialogue. Consensus meetings were subsequently held to formulate a strategic plan. Twenty participants attended the seminar focused on using multidisciplinary teams to improve the quality of life of the elderly after surgery. They resolved that the infrastructure should be modified to facilitate the production of quality publications and encourage research implementation. Moreover, the participants productively explored common misunderstandings and disputes regarding authorship and resource management within multidisciplinary research teams. A strategic plan and schematic organisational structure were drafted. In conclusion, world Café's simple yet powerful format empowered participants to discuss critical issues. The development of the strategic plan through group collaboration greatly aided the team in moving forwards **Keywords:** multidisciplinary teams; geriatric patients; World Café.

Introduction

Geriatric surgery is a field where patients require co-management and consultation across two or more relevant disciplines, such as surgery, anesthesiology, geriatric medicine, psychiatry, rehabilitation and nursing. With ageing, many different risk factors for adverse surgical outcomes accumulate from patients' baseline complexities, comorbidities, (Payton and Shook 2019) polypharmacy, (Oyarzun-Gonzalez et al., 2015) cognitive impairments (Needham et al., 2017 and Robinson and Eiseman 2008) and frailty (Shem Tov and Motot 2017). Since fragmentation of care might be a leading cause of poor surgical outcomes, there is a need to integrate skills, build new partnerships and expand academic activities beyond the traditional boundaries of individual disciplines in order to develop high-quality geriatric health care services.

A group of faculty staff working at the Department of Anesthesiology, Siriraj Hospital, recognised that a multidisciplinary approach to research related to the perioperative care pathway was necessary to advance knowledge and translate research findings to excellent practice. Rather than continuing to function as a group of independent researchers from 7 academic departments, the research team was granted permission to establish the Siriraj Integrated Perioperative Geriatric (SiPG) Excellent Research Center in June 2017. The directors of the newly-established joint centre set out to develop an infrastructure which would build new partnerships that expand the geriatric research foci beyond traditional boundaries and emphasise collaboration between researchers from different disciplines in order to solve important geriatric problems.

The success of an interdisciplinary initiative, "Building Interdisciplinary Geriatric Health Care Research Centers" (sponsored by RAND and the John A. Hartford Foundation), provided valuable lessons in how to engage stakeholders and achieve a viable infrastructure (Pincus et al., 2007). Growth of the Bangkok-based SiPG Excellent Research Center depends on not only receiving adequate funding and the active involvement of its directors, but also the engagement and collaboration of individual researchers and partnerships. Staff from the Center engage with people who are interested in what it does, and interact with others at both informal meetings and formal academic activities at every level. The quality of those stakeholder relationships will determine how well the Center delivers on its mission to deliver better health to, and enhance the well-being of, geriatric patients. To advance the building of a strong organisation, staff working at the Center organised a participatory workshop based on the World Café method. The objectives of the event were to develop a vision, mission statement and strategic plan.

Methods

This study was conducted to facilitate the establishment of the SiPG Excellent Research Center. The study was approved by the Siriraj Institutional Review Board (Si515/2017). The participatory workshop was led by a team from the Routine to Research Unit (R2R). The role of the R2R team is to transform institutions into learning organisations. Its core supporting activities are designed to inspire and motivate staff, develop their capacity and strengthen teamwork. World Café has been used as a tool by R2R for over 5 years, and this methodology was selected to foster staff engagement in addressing the challenges faced by the Center.

The World Café process has become an increasingly popular approach to responding to research, practice and policy-making issues. One of a new generation of participatory methods, it aims to create a setting in which participants share activities and reach inter-subjectivity to enable the development of positive responses to problems and challenges. In conducting a World Café event, seven core principles need to be observed: (1) the event has a clear purpose; (2) it is hosted in a hospitable space; (3) it explores questions that matter to the participants; (4) everybody's contribution is encouraged and valued; (5) the event connects diverse viewpoints; (6) people listen for insights and discoveries; and (7) participants share collective discoveries (Fallon et al., 2016).

Prior to conducting the World Café workshop for the Center, one fundamental task was formulating compelling questions which were relevant to the real-life concerns of the proposed attendees. The questions needed to address problems and issues found in, and across, the academic disciplines involved, and to require the participants to construct arguments in response. The questions were initially formed by the staff of the Center, but they were subsequently refined and clarified three times in consultation with experts (Figure 1). Eventually, the following three, provocative, engaging and worthwhile questions were developed:

- **Topic 1:** Describe the ideal value that should be added by the SiPG Excellent Research Center with regard to patients, your workplace and Siriraj Hospital.
- Topic 2: Suggest approaches to improve communication and collaboration within the Center.
- **Topic 3:** In order to promote the efficiency and viability of the Center, identify: (a) how resources and the research support team can be managed to maintain a good balance; and (b) strategies to be applied to authorship management.

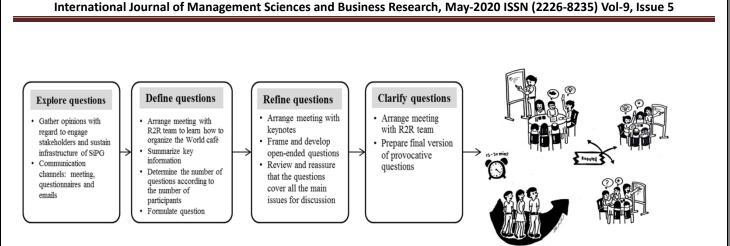


Figure 1. Steps for exploring matter questions.

As part of the preparations for the event, the Center team identified and invited individuals who should attend in order to ensure fruitful discussions and a productive exchange of ideas. The invitees comprised members of relevant steering and executive committees as well as academic leaders working in fields related to geriatric surgery (such as surgeons, anesthesiologists, geriatricians, psychiatrists, nutritionists and nurses). Furthermore, principal investigators and selected individual researchers who had been involved in research projects were invited.

The one-day meeting took place at a welcoming venue in Nakhon Pathom Province. After the keynote address by C.N., the session moved into the World Café setting. Three tables were set up in café style to create a relaxed and informal ambience. The participants had been strategically assigned to seats at the tables prior to the commencement of the process. The three hosts (C.N., A.N. and A.P.) were also divided between the tables, and they provided the respective table participants with a brief introduction to one of the three discussion questions before encouraging them to address the issues raised. The rule to follow was that participants were allowed to share their insights and suggestions one by one. In addition, participants were prohibited from interrupting any other participant who was sharing an opinion. Each host then summarised the main insights yielded by the exchange of views at their respective table using a mind map on a flipchart. The World Café discussion sessions took 15–20 minutes in total. After a round had finished, the participants rotated to the next table to consider a different question while the host stayed to act as a rapporteur for the incoming group. Each host introduced the same topic to the new group and summarised the views of the preceding set of participants. The new group then added its insights to the issues raised by the discussion question, and refined and elucidated the comprehensions of the previous group. This step was repeated until the participants had explored all three topics. After the rounds of café conversations were finalised, the attendees engaged in a plenary session to share their reflections on the three questions. That session concluded with three volunteers who summarised the collective responses to each of the three topic questions. The process enabled participants to hear the insights being shared by others in the room, and connections and discoveries were made. Finally, the R2R team conducted a quick debrief and asked participants for feedback and their feelings on the meeting (UNICEF 2019). Post-event evaluation questions were also dispatched to the participants after the event concluded. A.S. and R.R were tasked with analysing the information and developing an action plan; they then submitted their report and plan to the executive team for review and approval. Three rounds of the SiPG Consensus Meetings and two rounds of meetings with executive officers were conducted to agree on outcomes consistent with the goals of the Faculty of Medicine.

Results

The 20 participants in the World Café event (9 males and 13 females) were comprised of individual researchers, health care providers, the executive committee and staff working at the Center. The professional backgrounds of the health care providers and executive committee members were 7 medical doctors (2 anesthesiologists, 1 geriatrician, 1 surgeon, 1 psychiatrist, 1 orthopaedist and 1 physician nutrition specialist); 3 nurses; 1 psychologist; and 2 medical students. The research support officers consisted of 3

research assistants, 1 research fellow, 1 nurse, 1 psychologist and 1 physical therapist. Almost all of the participants (95%) reported that they not only benefited from the seminar but also were satisfied with the seminar and its administration by the R2R team.

The ideal values of the SiPG Excellent Research Center

With regard to the ideal value that should be added by the Research Center, the issue of most concern to the participants was not the research per se; instead, they focused on how the health, well-being and quality of life of the elderly could be improved following surgery. The participants reviewed the quality of perioperative care provided by Siriraj Hospital. They concluded that the hospital should create a brand model for the management of surgical patients to ensure effective resource utilisation; reduce waiting times for certain surgical services; and decrease lengths of hospital stay, incidences of complications and mortality rates in order to lower operating costs. The attendees further agreed that a multidisciplinary team should provide seamless continuity of care from the preoperative period until full recovery is achieved. They also concurred that the Research Center should play a role in creating a research infrastructure focused on facilitating the delivery of benefits to patients and the public. To ensure the delivery of best evidence and best practice, the attendees considered that the Center must pursue quality scientific research which obtains valid results in an ethical and efficient manner. The research publications should also be acceptable at the international level. In addition, it was proposed that the Center should develop agreement among stakeholders on the standardisation of particular practices for application to all patients.

Strategies for effective communication

Scientific problems and ground-breaking technologies require academic staff, teams of researchers and research assistants from different backgrounds to work together. The workshop participants recognised that one of challenges of working together is building effective communication. Open meetings were seen to be a good approach to the achievement of such communication within the workplace. It was felt that chairpersons must try to create receptive atmospheres; avoid tense environments; and keep meetings brief, simple and to the point. Moreover, it was stated that chairpersons and attendees need to be reasonable, display confidence, show respect, speak clearly and use a proper tone of voice. At the same time, meeting attendees need to practice being active listeners by focusing on what each team member is saying, being open to any ideas put forward, encouraging feedback, and avoiding blaming team members. In unofficial settings, communication via email and the Line application were considered to be potent. Their use was seen to enable team members to convey messages to others without taking them away from their work stations.

Key responsibilities of the executive committee and research support staff

Most participants placed much significance on the organisational structure of the Research Center and its human resource management. In particular, they concluded that the composition of the executive committee should be reviewed and the role of each member should be clearly defined. As well, it was proposed that the hospital's performance agreement system should be applied. This would ensure that all staff working at the Center are clear about the goals to be achieved and secure their commitment to attaining outcomes that promote the Center's goals.

As to the organisational structure of the Center, it was propounded that staff should be divided into two main groups: an academic group and a managerial group. Key responsibilities of the academic group would include directing research topics, participating in the formulation of clinical practice guidelines, supporting research implementation and encouraging research as a tool for policy change. The managerial group members would be comprised of a research administration manager and research officers. These staff would coordinate specialised areas of geriatric care among various sectors of the research community, monitor the progress of projects, specify resource management requirements, and review the allocation and prioritisation of resources for individual projects to ensure some flexibility. It was agreed that the research administration manager should have experience in research management, decision making, consultancy and the provision of assistance to the team. Moreover, the research officers should possess significant research skills and proficiency in areas such as planning, scheduling, using a variety of research methods, interviewing and data collection.

How should authorship be organised?

Misunderstandings and disputes about authorship are commonplace within multidisciplinary research teams. Given that the Research Center team was also concerned about the potential for conflicts which could undermine knowledge sharing, collaboration and research engagement, the participants' opinions about authorship management were explored. Most participants agreed that recognition of co-authorship, which is generally seen to be a primary benefit of conducting research studies, was a sensitive issue. They felt that it is important to have a means to manage the author sequence and accredit all contributions. In addition, all researchers must be informed of the approach to be utilized in order that their roles are clearly defined. The agreement should also cover all parties involved, such as staff members, research assistants and nurses. Some participants suggested making an agreement before a research project's initiation and documenting the authors' contributions in the research proposal. The authorship and acknowledgement of contributions should be made by referring to the criteria for applications for academic positions at Mahidol University. However, this tentative agreement could be adjusted, depending on the actual participation as well as the relationship. However, it was agreed that guest authorship should be discouraged.

From brainstorming to the strategic plan framework

The Center team recognised that the formulation of a strategic plan for the SiPG Excellent Research Center is essential. It was seen to be important to focus on what people want and need from the Center in order to achieve its vision through the attainment of its strategic goals. Devising the strategies and an organisational framework required the input of all participants. The proposed research administration's structure and functions are illustrated at Figure 2, and the draft strategic plan at Figure 3.

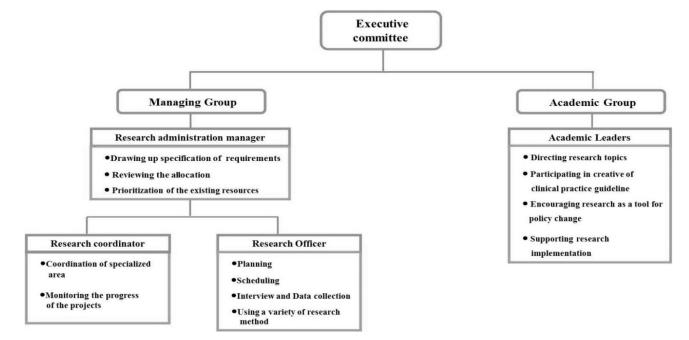


Figure 2. Research administration.

WORLD CLASS MEDICAL SCHOOL

SiPG

VISION : To serve as a complete multidisciplinary research center aiming at improving services and promoting quality of life among the elderly patients receiving operations



Figure 3. A draft strategic plan.

Discussion

The Research Center team was unanimous that multidisciplinary research can have a profound influence on the quality of health care services for the elderly population, can facilitate faculty and student learning, and can enhance the national and international reputation of the university. The strategic plan development was regarded as an essential step forward in growing the SiPG Excellent Research Center. The direct input of all workshop attendees was utilised to establish strategic directions for the Center and the organisational structure needed to support their execution.

A research center is an organisational unit that sits outside the traditional faculty or departmental structure. This entity has been developed in response to the desire for a more flexible means of collaboration between experts from various fields on specific issues. In theory, a center provides a fertile ground to produce quality interdisciplinary research and training. In practice, however, there are many constraints, ranging from academic structures, career development, cost and benefit sharing between collaborating departments, and the periods of grant funding (McGill et al., 2017). Some suggestions have been made as to how to eliminate barriers, such as developing a commitment to the common goal of collaboration, fostering a willingness to share responsibility for patient care, establishing methods to resolve conflicts, and developing trust between team members (O'Reilly et al., 2017). World Café dialogues provide an opportunity for stakeholders to engage in open conversations and hear from all participants.

Nowadays, a number of tools are available to improve organisational communication; each has unique attributes and can be applied to specific situations. Appreciative Inquiry (AI), for example, a method used to stimulate discussion and question formation, can lead to the strong point in improvement opportunities. The process leading to AI is termed the "4Ds". The first step, "discovery", employs constructive dialogue to identify strong points of an organisation. The second step, "dream", entails establishing the level of organisational enthusiasm through consideration of the question, "What might this become?" At this stage, everyone interacts to identify the hopes and dreams that are shared by people in the organisation. In the third step, termed "design", a description of an ideal organisation and how processes should work is developed. The last action step, "destiny", involves the implementation of the agreed design by creating activities through imagination in order to promote learning and innovation (Cooperrider et al., 2008). As for methods that emphasise listening skills, there are at least two. The first, "Discussion through Dialogue", focuses on listening, which requires individuals to develop the ability to become more open-minded and open-hearted.

This concept believes that when people listen to others with an open mind, they will build an understanding of the will of the people speaking (Bohm and Weinberg 2004). The second method, called Theory U, is used when people strive to be an insightful listener. It is divided into 4 levels of listening: "Downloading", "Factual", "Empathetic" and "Generative" (Scharmer 2007).

World Café represents an extension and application of the strong points of each of the above two methods (Discussion through Dialogue and Theory U) in order to promote knowledge exchange. The activities of a World Café event should be arranged under the concept of a "friendly atmosphere" to create a warm, homefeeling environment for participants while they are discussing or sharing experiences and opinions on topics. This approach also serves to inspire listeners and prompt them to voice opinions. In this way, different ideas and discoveries can be shared to gain a better understanding which can, in turn, be used to shape the future. Through this process, not only do people get to gather new information and content, but their relationships with their co-workers can be strengthened (Brown and Isaacs 2005). The World Café methodology has been applied in many different forms and has proven to be highly successful in a variety of fields. For example, at the community and societal levels, the main focus is to improve or reduce social inequality. A World Café event can target people living in the local community, giving them the chance to share knowledge and ideas and agree upon the best solutions. The workshop can also provide an opportunity for the relevant authorities to learn more about the core issues and struggles faced by these locals. In the health field, a World Café activity can promote good health and foster community spirit, thereby enhancing cooperation between patients, their families and medical teams. Solutions can then be discussed and plans developed to overcome recognised obstacles. Although the topics and objectives of each World Café event will inevitably vary, people should share the expectation that everyone will be called upon to actively contribute. This will be in the form of brainstorming, idea generation and experience sharing, all done in a relaxing atmosphere. They will also gain a clear picture of how plans could be implemented in the future.

Regarding the ideal added-value of the SiPG Excellent Research Center, most participants expected it to become a source of research which would be recognised internationally. It was agreed that the implementation of the research findings should positively impact on the lives of the elderly after surgery. The ideal added-value should reflect the vision of the Center, which in turn paves the way for the mission that members hope to accomplish. The mission was seen to be divisible into two tasks. One is the conduct of research studies that are widely acknowledged and recognised internationally, and the second is the execution of the study recommendations to realise optimal benefits. Both tasks need efficient research management within the organisation.

A highly popular theory for research management is the Logical Framework Analysis, which focuses on logical relationships and the relationships between basic elements. The elements can be divided into two sets. The first of these can be managed under the principal investigation and team, and it is mainly concerned with resource input. The activities can then be arranged to produce output, such as full research findings or even clinical practice guidelines. This step is under the full control of a project management team, which is led by a project leader responsible for overseeing the plan. However, the second set of elements, which is about putting the new ideas into practice, is beyond the control of the project management team. This is considered a crucial step as it represents the mission that we hope to accomplish to reflect the vision.

Another interesting theory, "Theory of Change," is that research management aims for the greatest efficiency to achieve sustainability. This theory is widely accepted by human rights groups, international development organisations and research organisations. Moreover, the theory is used as a tool to assess the efficiency and outcomes of a project that is expected to continue (Allen et al. 2017). It is also used to evaluate the impact of projects and strategies for research management on a large scale by relying on input and activities, which can produce output from certain projects. Similarly, Logical Framework Analysis focuses on finding the most effective strategy needed to reach the greatest operational efficiency by encompassing stakeholders and beneficiaries and going through changes in order for the behavior, relationships, ideas and actions of each party to be accepted. Efficient management can produce the desired outcomes and create both short- and long-term impacts. This approach emphasises the complexity of

activities and interventions in order to involve stakeholders. The reasoning behind the approach is that any complexity that occurs in one activity can affect many other activities through a cyclical process. The results can be reached via multiple pathways. At the same time, the Theory of Change focuses on the drivers of relationships (which can lead to changes in behavior) and the relationships between individuals, groups of people and members of the business and government sectors who are pushing for a transition from conventional or traditional platforms to new platforms in the community and society. The changes might be influenced by, for example, new technology and innovation, changes in government policies and access to new information. The Theory of Change can connect the sphere of a project with the sphere of influence in both the short- and medium-term, and directly and indirectly the sphere of interest, which is the scaling up of the outcome and the wide impact that can lead to long-term social change (Figure 4).

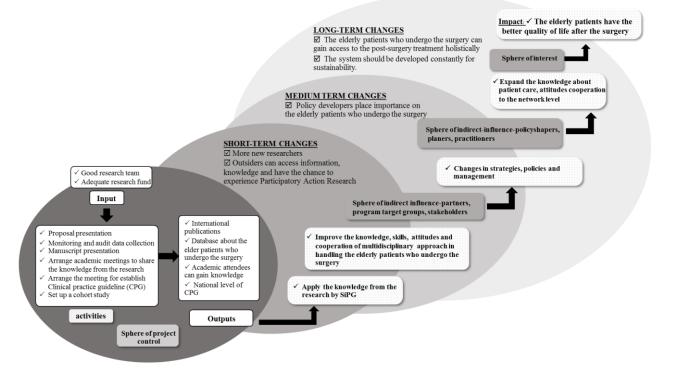


Figure 4. Outcome mapping to achieve improve quality of life after surgery.

Conclusions

Carrying out research is a huge investment. If the studies only provide conclusions or new knowledge that satisfies researchers' curiosity but none of the ideas proposed by the research are implemented, the investment would represent a major waste of limited and precious resources. All of the parties involved in research should benefit from the time, money and effort put into studies. Most importantly, people at all levels within an organisation should have a positive attitude towards the benefits that can come from doing research because the studies will contribute to the sustainability of patient care and professional development in the future. The World Café methodology proved to provide a simple yet powerful conversation process to foster constructive dialogue. The method created a means by which people were able to talk deeply about critical issues, share knowledge and shape the future. Furthermore, the establishment of the Research Center's strategic plan through the sharing of the collective wisdom of the participants was an important step in helping the team to move forwards.

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