Exploring why Quality Circles work in Primary Health Care: a Realist Synthesis



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Background

• Quality Circles (QCs) are small groups of 6 to 12 professionals who meet at regular intervals to consider their standard practice.

- The focus of discussion is a critical evaluation of a key aspect within quality in health care.
- The groups provide a social context for reflective practice.
- Facilitators observe and lead the group through the circle of quality improvement.
- QCs consist of more than one educational step and participants are actively involved in the process (1).

QC techniques:

- > Facilitation
- Educational material
- ➤ Workshop-like atmosphere
- Local knowledge experts
- Audit and feedback
- With or without outreach visits
- Local consensus processes
- Rehearsal of clinical skills and roleplay

The terms Practice Based Small Group Work, Peer Review Group, Problem Based Small Group Learning, Practice Based Research Group, Quality Circle, Continuous Medical Education Group, and Continuous Professional Development Group are used interchangeably in different European countries (2).

What is the problem?

- Unpredictable positive effect sizes on behaviour change
- QCs have all the properties of a complex intervention and therefore:
 - * stakeholders have difficulties understanding how the results are achieved.
 - * active components of QCs which result in changes in behaviour are unknown.
 - * it is unknown how QCs respond to local needs and to changes in economic and cultural circumstances(3).
- > To understand what works and why in quality improvement, there is a need for theory-driven evaluation (4).

Aims and objectives

The overall aim of this research is to identify optimal conditions for QCs and inform stakeholders about what makes QCs succeed or fail.

The objective is to synthesize evidence from different sources to develop a programme theory that allows evaluation of QCs and enables stakeholders and policy makers to understand and improve QCs.

Methods

The purpose of realist synthesis is to explain when, how and why an intervention works and to unpick the complex relationship between context, content, application and outcomes; in other words to develop a programme theory (5).

Scoping search

SE

Deductive development

Rough programme theory

> To provide key elements for forming a rough initial theory using the deductive approach. This means that theory is constructed from cases..

Interviews and focus groups

Mental Model

Preliminary programme theory

- > To focus the research question
 - > To provide a mental model of the programme theory. (stakeholder version)
 - > To develop an appropriate search strategy for the REALIST SYNTHESIS.

Realist synthesis

groups

Deductive development

Disputable programme theory

Interviews and focus

Refinement of programme theory

Programme theory

> To critique the proposed programme theory

> To provide threads of theories (literature review)

> To build a disputable programme theory

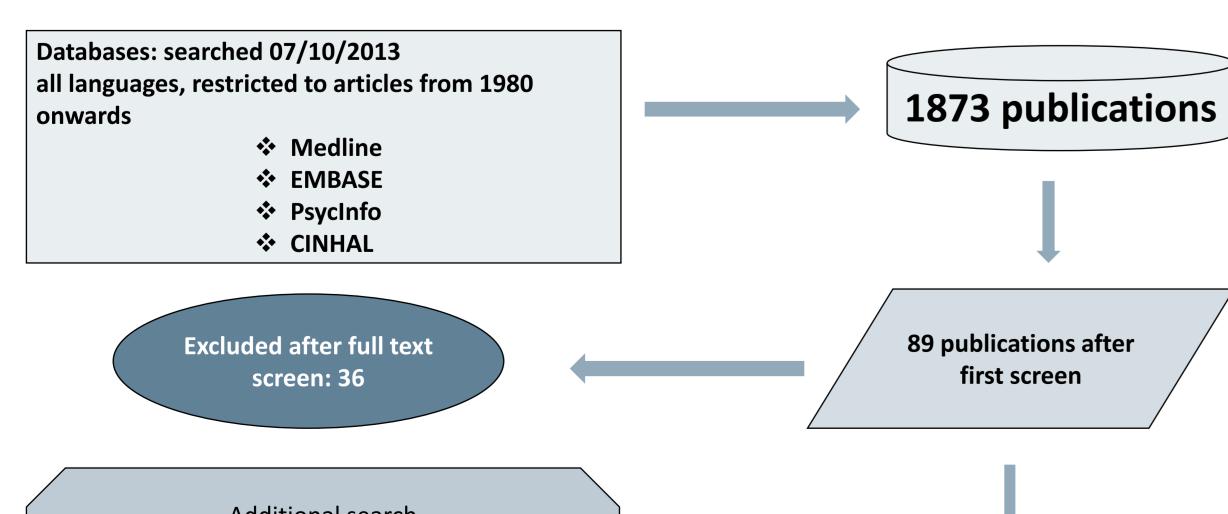
> To improve the proposed programme theory (6)

Search

Categories of search terms:

-Programme terms (Quality Circle) -Group terms

-Quality improvement term -Primary care terms.



Additional search "search for kinship": 23 Backward and forward citation "key papers" Web of Science Google Scholar Contact with stakeholders

76 publications

2) ROHRBASSER, A., MICKAN, S. & HARRIS, J. 2013. Exploring why quality circles work in primary health care: a realist review protocol. Systematic Reviews, 2, 110.

Programme theory and contextual features

Process in the group	Actions Taken	Mechanisms
Shared understanding of a problem [SOCIALIZATION OF KNOWLEDGE]	Exchanging experiences: presentations of own clinical cases followed by case discussions.	Feeling actively involved, having a sense of ownership and sense of affiliation to the group. Level of trust increases.
Sharing knowledge [SOCIALIZATION OF KNOWLEDGE]	Exchange of difficult experiences and exchange of emotional responses.	Mutual understanding increases, relevant practical knowledge is discussed.
Reflection on action [EXTERNALIZATION OF KNOWLEDGE]	Discussion of personal responses on actions in a safe environment.	Previous knowledge is activated. The group supports exploratory behaviour.
dentifying gaps of knowledge and quality improvement issues EXERNALIZATION/COMBINING]	Comparing diagnostic habits or prescription patterns OR other means of mirroring practice routines.	Critical reflection on experience and identification of learning needs or necessary changes.
lustifying new concepts combining knowledge]	Comparing and contrasting between practitioner-based knowledge and evidence-based knowledge.	Feeling of competency and empowerment through the process.
Testing new knowledge [INTERNALIZATION OF NEW KNOWLEDGE]	Identification of barriers and obstacles.	Intentions lead to increased effort to perform the behaviour (Theory of reasoned Action). Feeling of empowerment by the process.
Systematic use [GENERAL INTERNALIZATION OF NEW KNOWLEDGE]	Practitioners use new knowledge and skills to improve practice	Newly developed skills are important to people. Feeling of being in control and empowered by the process

Knowledge

Constructivist view of knowledge: based on distinction making in observation and therefore context sensitive and not transferable (practitioner-based knowledge)

> Tacit knowledge is an unwritten, unspoken, and vast hidden storehouse of knowledge held by practically every human being, based on emotions, experiences, insights, intuition, observations and internalized information

Representational view of knowledge: knowledge is unchanging, universal and objective and therefore directly transferable (evidence-based literature) (7)

Explicit knowledge is articulated knowledge, expressed and recorded as words, numbers, codes, mathematical and scientific formulae.

Contextual features necessary for the process

Enabling Context	Description of contextual features
Mutual trust	Trust within the group and trust between the management and the group.
Active empathy	QC members must care about their colleagues when they question observations.
Access to help	Financial resources, library resources, administrative and didactic support. Create and accept social processes that support the circulation of knowledge, such as meetings, social events.
Leniency in judgement	Management should value knowledge from QCs that can improve performance and also value the fact that QCs may resolve emerging problems. No excessive demands.
Courage	Accept local adjustments and tacit beliefs in order to make them explicit. Balance between autonomy and the urge to stimulate, to improve performance. Value and trust knowledge that arises in OCs.

Contextual features supporting the group

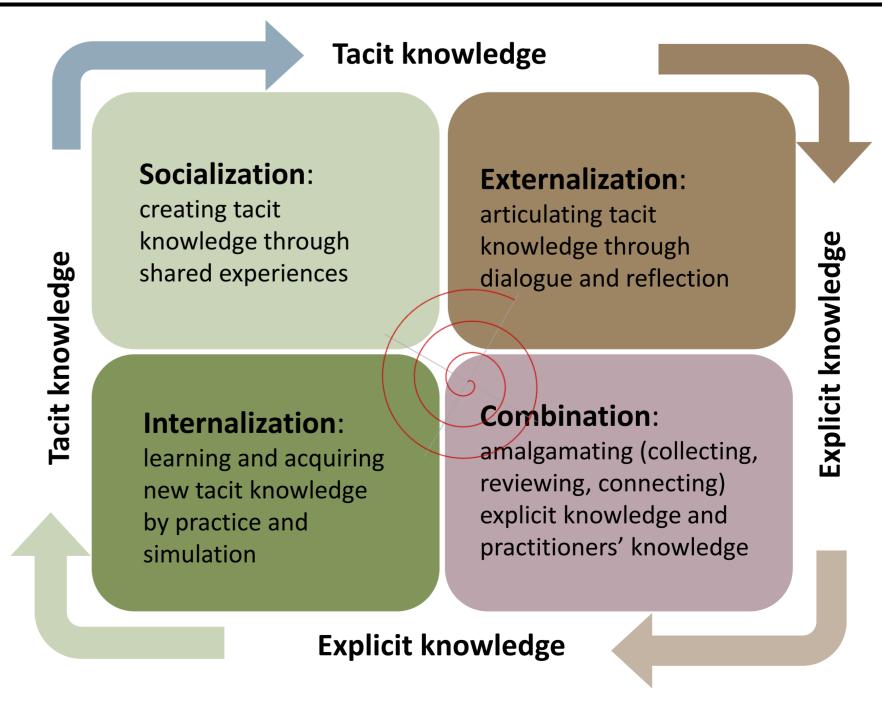
Support of the group	Description of supporting contexts	
Facilitation	Opens discussions, clarifies statements, summarizes, elicits interactive responses. They respect each member's contributions and keep an appropriate balance between challenge and comfort. Facilitators create a safe environment where no one gets hurt, where it is possible to communicate openly. They establish and maintain a learning environment.	
Size of the group	Groups exceeding 12-15 people become inefficient and groups smaller than 4 do not have the same exchange of thoughts.	
Composition of the group	Should share common interests and the same concerns. They should be able to relate to each other's problems.	
Safe environment	Management should value knowledge from QCs that can improve performance and also value the fact that QCs may resolve emerging problems. No excessive demands.	
Protected time	Should be considered as working time, no other duties, no disadvantages.	

Individual features blocking the group

Individual barriers	Description of individual barriers
Limited accommodation	New knowledge has to be assimilated with pre-existing experiences. This process can be challenging if radically new situations arise in the form of new knowledge that cannot become part of justified individual beliefs.
Threat to self image	Breaking away from habits may feel risky.
Variety in the group	Variety in the group; the very source for creativity may turn into a threat if individual positions are too remote from each other.
Personal withdrawal	Facilitators have to be very observant about people who drop out and withdraw.

Conclusion

QCs create new concepts by combining practitioner-based knowledge (constructivist view of knowledge) and evidence-based medical knowledge (representational view of knowledge) after individual feedback on practice routines. The overarching process can be explained by the Organizational Knowledge Creation Theory (8): socialisation, externalization and combination, followed by internalization of knowledge (SECI Model). This is a delicate process and the reason why contextual features are key.



Poster URL: http://equip.woncaeurope.org/sites/equip/files/PP-slides/QCRealist.pdf

6) ROHRBASSER, A. 2015. 47th EQuiP Meeting in Fischingen (Switzerland) 23-25 April 2015 [Online]. Denmark: EQuiP. Available: http://equip.dudal.com/flx/events/47th_equip_meeting_in_switzerland/ [Accessed 04/06 2016]. 1) BAHRS, O. 1995. Was ist ein Qualitätszirkel. In: BAHRS, O., GERLACH, F. M. & SZECSENYI, J. (eds.) Ärztliche Qualitätszirkel. 2 ed. Köln: Deutscher Ärzteverlag. HILDRETH, P. M. & KIMBLE, C. 2002. The duality of knowledge. *Information research*, 8. 8) NONAKA, I., VON KROGH, G. & VOELPEL, S. 2006. Organizational knowledge creation theory: Evolutionary paths and future

advances. Organization studies, 27, 1179-1208.

3) CRAIG, P., DIEPPE, P., MACINTYRE, S., MICHIE, S., NAZARETH, I. & PETTICREW, M. 2013. Developing and evaluating complex interventions: The new Medical Research Council guidance. International Journal of Nursing Studies, 50, 587-592 4) WALSHE, K. 2007. Understanding what works--and why--in quality improvement: the need for theory-driven evaluation. Int J

Qual Health Care, 19, 57-9. 5) PAWSON, R. 2006. Evidence Based Policy: A Realist Perspective, London, SAGE.