Review Article

Nursing Research Carnival: A Fun-Based Approach to Building the Nursing Research Culture

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Abstract

A disinterest in research remains apparent despite research and evidence-based practice gaining much momentum in healthcare in recent years. Though, research conferences or research educational sessions are organized most of the time to enhance the nursing research culture, nurses continue to face multiple barriers that inhibit their interest in research activities. This paper articulates the need for fun-based approach to building the nursing research culture and describes the authors' employment of this approach through the conduct of a Nursing Research Carnival.

Keywords: Healthcare; Nursing research culture; Nursing research carnival

Introduction

Research and evidence-based practice has gained much momentum in healthcare in recent years. Today, these scholarly activities play a pivotal role in facilitating the translation of research findings into healthcare practices and policies. Studies have shown that making clinical decisions based on the most up-to-date evidence from relevant and valid research leads to better patient outcomes [1,2]. With this increasing emphasis on scholarly productivity, constructing the ideal evidence-driven landscape for innovative and novel healthcare practices requires collaborative commitment from nurses. Hence, a culture of research needs to be built for nurses to have the interest in these scholarly engagements.

Despite the importance of research, the disinterest in research culture is evident. Nurses commonly cited insufficient time or authority for reading literature and implementing new ideas. These diminish their interest in engaging in scholarly activities such as conducting research studies [3,4] also stated that as compared to clinical activities, global focus on nursing research requires further development to get nurses to be motivated to engage in research activities.

Though research conferences or educational sessions are conducted frequently by academic centers and health institutions to enhance the nursing research culture, the authors' have employed a fun-based approach in the form of a Nursing Research Carnival. This paper articulates the need for fun-based approach to building the nursing research culture and describes the authors' employment of this approach.

Need for Fun-Based Approach

Though a dearth of evidence existed on the fun-based approach specifically on building nursing research culture, education has been suggested as a strategy to instill a research culture in an applied clinical setting [5]. Yet, when most people think of learning about research education, what often comes to mind is a structured classroom environment where conventional instructional learning methods are adopted. This is especially so of research methods which

is often described as "a drag" by learners who perceived themselves as having to memorize research terminologies. According to Prensky, the learners of today have changed in some fundamentally important way. Today's learners cannot be adequately engaged by the conventional methods of teaching, not because it is too difficult but because it is boring. Learners, whose preferences and abilities have been shaped by digital technologies and most notably video games, are no longer acceptable towards being told the information they need to them but prefers to discover the information for themselves through construction, interaction and, above all, fun [6].

Fun-based approach to education can incorporate concepts and principles of adult learning, including promoting self-learning and participation [7] explained that there is a natural affiliation between children, play, and desire to have fun which makes games an ideal vehicle for teaching. The role of fun and enjoyment has also been identified as important in learning for older adults.

Bowman and Kearns, when investigating learning for the mature age worker, found that using a variety of approaches to learning helps to make learning interesting and fun. Fun is considered to be an important element to learning as it increases motivation by enhancing underlying intrinsic motivation towards goal directed activities [8].

Employment of a Fun-Based Approach

An inaugural Nursing Research Carnival was conducted to bring nurses from various levels and disciplines at a major public health institution together to be educated about research while building the research culture in a fun environment. Several strategies such as creation of the competitive context, education through games and edutainment were utilized during the carnival as part of the fun-based approach.

Creating the competitive context

Besides merely having nurses gathered ideas about the healthcare landscape through hearing from oral and poster presenters about past research studies, a competitive context was created during the carnival. The fun element was injected where nurses were engaged in a competition to answer questions about research methodologies

Table 1: Learner's perception.

Scale (Possible range)[a]	Overall Mean (Mean Score)[b]	SD	t	df	p
Total (3-12)			16.15	92	.000[*]
Pre-test	5.33	2.02			
Post-test	8.05	1.35			
Interest in research (1-4)			15.49	92	.000[*]
Pre-test	1.72	0.79			
Post-test	3.18	0.62			
Research knowledge and skills development (1-4)			16.46	92	.000[*]
Pre-test	1.91	0.75			
Post-test	3.08	0.63			
Conduct future research studies (1-4)			1.68	92	.090
Pre-test	1.72	0.79			
Post-test	1.82	0.82			

Note: A Possible range of scores for each scale is denoted in the parentheses.
[*]Denotes statistically significant results.

and findings based on the research studies presented by the oral and poster presenters. Examples of quiz questions included "what was the study design utilized in the study?" or "What benefits can such a study design bring about?" The organizers generated a quiz after every presentation for nurses to participate. Nurses who provided the highest number of correct responses to the questions in the quiz using the shortest amount of time were entitled to win a prize. The competitive context provides a challenging situation for the nurses thus making learning fun and enjoyable. Learners are emotionally aroused as they draw inferences from each other's emotions [9] and challenges. Adults experience positive educational experiences through positive emotions that make learning fun and enjoyable [10]. The competitive context not only promotes active and interactive learning from the oral and poster presentations, but also enhances learners' interest in being educated about research while they aimed to be the fastest person to respond correctly to the quiz questions about research methodologies.

Educating through games

Games are among the most ancient and sophisticated forms of designed interaction [11]. "Games encourage, entertain, teach, and promote fluency and communicative skills" [12]. Game-based learning has traditionally been used in college classrooms to help facilitate an idea or to illustrate concepts to learners to test their knowledge, allow for transfer-of-learning, and to keep the class engaged [11].

Educational games are games that are designed to help people to learn about certain subjects, expand concepts, reinforce development, understand a historical event or culture, or assist them in learning a skill as they play. Through educational games, human beings learn about a specific subject or a specific skill [11].

During the Nursing Research Carnival, nurses were also taken on a learning journey of research knowledge on consent taking elements, study design and other research concepts through the "Who Wants to be a Millionaire" game, creating lots of laughter and audience engagement in the process. Their research skills were also honed by engaging in educational game booths where they had to

stack up the levels of evidence appropriately, engaged in framing research studies based on research questions provided or sequenced the steps in conducting research studies. One of the game involved nurses matching research terminologies to clues provided. The game saw many nurses flipping through research textbooks to correctly match research terminologies to the clues provided. Many of the nurses appreciated the opportunity to review research textbooks as they rarely had the opportunities to do so as they were often busy with providing care for patients,

The games required practical involvement from nurses, thus creating a fun-filled and relaxing atmosphere that preserved motivation towards learning [10,13]. On the effectiveness of games, teachers in Huyen & Nga reported that learning through games took place quicker with longer retention of the learned materials than didactic education. Learning taking place in a stress-free and comfortable environment through games also has the potential to arouse cultural awareness [14].

Edutainment

To enhance pleasure and fun in learning, the word "edutainment" has surfaced in the literature where aspects of education and entertainment are combined into experiences that seek to improve learning. Engagement in games in itself is also an edutainment strategy [15]. However, beyond games, nurses were entertained through a variety of ways during the Nursing Research Carnival. Prominent figures from the healthcare institution went on stage to provide useful tips on overcoming the challenges of a researcher. They were also entertained with hilarious video shows featuring fellow nurses to highlight that there is no health without research and that they are not alone when conducting research.

Since infrastructure is also an important strategy to build a culture of research in applied clinical setting [5], a library and facilities that supported the conduct of research studies such as interview rooms, data analytic software were also launched. Edutainment as a strategy are well noted to arouse student interest and motivation while cultivating a culture of continuous improvement [15].

Nurses' Perception of the Fun-Based Approach

As part of the efforts to evaluate the fun-based approach, nurses who participated in the Nursing Research Carnival were asked to provide their feedback on the Nursing Research Carnival. Many commented that the event was fun. They enjoyed the carnival and have learnt more about nursing research. 93 of them provided quantitative feedback. The results are presented in Table 1. Overall, there was a significance change in their perception of the research culture within the institution. Their ratings improved from M = 5.33 (SD = 2.02) before participating in the carnival to M = 8.05 (SD = 1.35) after participation, t (92) =16.15, p<0.001. This indicated that more nurses viewed research culture positively following the carnival. Both their interest in research and their knowledge and skills in research improved significantly after the event, t (92) = 15.49, p<0.001 and t(92) = 16.46, P<0.001 respectively. Nevertheless, even though there was slight aim provement in terms of their motivation to conduct nursing research studies in the future, the carnival itself may not be sufficient to sustain this as evident by the non-significant results, t (92) = 1.68, p = 0.09.

Discussion

This paper has discussed the need for a fun-based approach and described the employment of such an approach towards building a nursing research culture within a public health institution. Research has conventionally been taught in the classroom using instructional methods. The fun-based approach to culture building offers a novel and interactive approach to teaching and learning. It facilitates learner's self-efficacy as they learn on their own in an interactive manner. Such an approach enhances pattern recognition and response time becomes better, decision-making skills improve, and the learner's overall positive emotions for learning increase [13]. This makes it a complete learning package for learners irrespective of their age [13], which makes it suitable for engaging nurses in the workplace with varied age groups.

Using a fun-based approach allows the customization of the earning experience, instead of following the convention path of learning typical of a "non-game", "serious" topics relating to research. The injection of fun elements could create a learning environment that facilitated interest in research and learning about research knowledge and skills through competition, games and edutainment rather than memorizing the material that others have presented. It also changes the motivation of learners from finishing a task to participating in the fun. Fun-based learning allows learners to freely experience learning and provides educators the means to create a representation of the lesson to be taught which is in action and naturally more entertaining unlike convention instructional methods taking place in the classroom.

Serious efforts to develop an understanding of the use of fun elements and games are surprisingly rare even among the communities of people who create them [13]. This paper has attempted to offer some insights by understanding learners' perception of the fun-based approach following the Nursing Research Carnival. Though limitations exist where neither validated tool was used to collect data nor data relates specifically to enhancement of culture, the significant change in perceived research interest and knowledge and skills suggest potential contribution of the fun-based approach towards culture building.

Conclusion

Research and evidence-based practice activities has become a common occurrence of health institution. Nurses' being on the frontline serving patients, are important to be involved in the culture of research. Fun-based approach has been employed and has the potential to be utilized as a strategy to build of the culture of research for nurses as evident by the positive nurses' perception of the fun-based approach.

Acknowledgement

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