Shared Decision-Making: A Phenomenological Study of Student Service Learning

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ABSTRACT: The concept of collaborative shared decision-making began with the quality assurance and research efforts associated with the late 1970’s effort of the United States of America President Jimmy Carter. The value of service-learning has been well documented in medical and allied health education. Several studies have examined the cultural experiences and clinical reasoning abilities of persons involved in service-learning. What has not been well-examined is the concept of shared decision-making by those engaged in service-learning. The purpose of this phenomenological study was to identify how Occupational Therapy (OT) and Physical Therapy (PT) students defined shared decision-making while engaged in a weeklong international service-learning experience with an underserved population in Guatemala City, Guatemala. Through facilitated and recorded discussion, the researchers used qualitative methods to unearth the lived experience and shared decision-making of student participants during the daily service-learning activities. Concepts related to a shared decision-making definition evolved during the week of service-learning for these students. Thoughtful reflection identified processes whereby collective problem-solving contributed to both student experiential learning while addressing the broader needs of the client and the underserved population. Participants defined shared decision-making as a collaborative and interprofessional experience. The beliefs and values of team members, including the patient/client, were found to be influential and relevant to the definition.

KEYWORDS: Shared decision-making, occupational therapy, physical therapy, collaborative learning.

I. INTRODUCTION

The concept of collaborative shared decision-making began with the quality assurance and research efforts associated with the late 1970’s effort of the United States of America President Jimmy Carter: The Presidents Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research [1]. Appointed members to the Commission, consisting mostly of medical doctors, met to explore issues related to informed consent, communication, and the sharing of information between the physician and patient, the ethics of medical care, decision-making by health care professionals, and health care access. One result of this collective conversation was a shift of focus towards increased involvement of the patient and their caregiver in collective decision-making around the aspects of medical treatment [2]. Today, conversations continue regarding the sharing of information and decision-making within the realm of patient-centered care.

Patient-centered care requires that the healthcare team be focused on responding to patient needs in a respectful, collaborative, and responsive manner [3-8]. Shared patient-centered decision-making (SDM) focuses on collaborative decision-making with the patient regarding treatment [3,5,8]; terms such as negotiation and partnership have been used to define and describe the process of collaborative decision-making [8]. To be concise, using SDM in healthcare means that informed decisions related to care are made together. This process becomes a dynamic collaboration that provides a patient with the information needed, including health benefits and cost benefits, as well as the risks, so they are better informed regarding their direction of care [5]. Similarly, interprofessional shared decision-making includes collaboration among different members of the healthcare team in addition to the patient [3,9,4,6,7]. These favorable outcomes are directly linked to buy-in and to the adherence of a patient to their care plan and any education of the medical process, including their identified pathologies, illnesses, conditions, or task impairments. Continuity and carryover by the patient with respect to outcomes have also been correlated to healthcare team member involvement [3,4,6,7]. The potential exists too to decrease the cost of care when all members of the healthcare team, including the patient, are acting as one and collaborating with a clearly defined focus and plan of care available to all [7].

As healthcare has expanded beyond the traditional borders of hospitals and clinics so too has the need to understand patient-centered care and decision-making in different contexts, cultures, care planning, and delivery methods. Medical service-learning is
Shared Decision-Making: A Phenomenological Study of Student Service Learning

one such context. Through service-learning, healthcare teams generally provide medical care to underserved populations nationally and internationally while often linking the service-learning experience to the education and curriculum of health science students [10-19]. Research related to inter-professional service-learning is not novel. Several studies have been performed examining the cultural experiences, educational benefits, program development, and clinical reasoning of participants while engaged in service-learning [20,21,12,22-25,15,26-28]. What has not been well-developed or researched, though, is the concept of interprofessional shared decision-making in the context of medical service learning.

II. PURPOSE AND SIGNIFICANCE
The two-fold purpose of this study was to unearth the Occupational Therapy (OT) and Physical Therapy (PT) students’ working definition of shared decision-making and to explore the lived-experience of the students as they collaborated in a client-centered fashion during a weeklong international service-learning experience with an underserved population in Guatemala City, Guatemala. While there have been some documented service-learning outcomes in both OT and PT education many of those outcomes have focused on curriculum, cultural awareness, and some on a degree of clinical reasoning [21,24,25,27]. Few researchers have focused on the lived-experience of the participants themselves (i.e., the students) or their definition of shared decision-making while engaged in service-learning experience.

III. RESEARCH QUESTIONS
Leveraging the international service-learning opportunity currently in place at the University of ABC, researchers sought to explore the concept of shared decision-making, how students defined shared decision-making, and how this decision-making influenced their care, in a community where few medical resources exist [29]. The primary research question: How do OT and PT students define shared decision-making while participating in an international service-learning experience with an underserved population in Guatemala City, Guatemala? The secondary research question: What is the lived experience of the students involved in this type of shared decision-making?

The researchers predicted that how students experience, define, and describe shared decision-making might be based on the assigned service-learning activity and it may change day-to-day. These changes may be due in part to the teams and activities they are assigned to each day, as well as the defined roles within those assignments, themselves; in short, team dynamics may greatly influence the descriptions as well as the experience of each student.

IV. METHODS AND MATERIALS
This was a qualitative phenomenological investigation. Phenomenological investigations describe the common meaning for individuals of their lived experience of a concept or phenomenon [30]. Phenomenology has its roots in the 1970 work of Edmund Husserl [31] and the research methodology has been expanded since then by the popular works of Heidegger, Sartre, and Merleau-Ponty [31,32].

The methodology used in this investigation is best aligned with the 1994 four-step process of the work of Clark Moustakas. First, a heterogeneous group needed to be identified based upon demographics. Second, a philosophical discussion occurred among the group (students and researchers) to refuse the subjective-objective perspective and therefore conclude that the planned type of research had both a qualitative as well as quantitative component. Third, the two on-location researchers, present for the weeklong experience, bracketed themselves by discussing personal experiences with the phenomenon both prior to the one-week experience, as well as during the planned weeklong experience. This bracketing helped the researchers better understand how any previous service-learning experiences may or may not affect the [present] experience, and how any preconceived notions of shared decision-making might affect their observations and interactions with the students during [the planned] weeklong experience. Fourth, end-of-the-day group discussions and any individual reporting (if needed), or smaller group one-on-one debriefings, led to the transcribed group discussions. Upon completion of the weeklong experience, data analysis of the transcribed discussions occurred following a very systematic process.

V. PARTICIPANTS
Approval for this research project was granted through the Institutional Review Board (IRB) at the University of ABC in Texas. Written consent was obtained from all participants upon arrival at the facility where the team was housed in Guatemala City, Guatemala. The participants were OT and PT students who volunteered their time during their 14-day term break to participate in the weeklong service-learning experience in collaboration with the host organization, Potter’s House International (PHAI). All participants were made aware that participation in the proposed study was independent of the service-learning experience. All were made aware too that there was no obligation to participate in the study while still participating in the service-learning experience itself. No power analysis was performed, or in this case was needed. Inclusion criteria: All student service-learning participants could participate in the study. Exclusion criteria: None. The research plan focused on gathering data related to student interprofessional service learning and shared decision-making experiences during end-of-the-day focus group discussions led by the two on-location researchers (i.e., Researcher One and Two, of the three researchers).
Shared Decision-Making: A Phenomenological Study of Student Service Learning

VI. DATA COLLECTION AND ANALYSIS

Students provided education and rehabilitative services over the course of the weeklong experience and had the opportunity to participate in daily service activities on a rotational basis each day during the week. Service activities included: the building of a simple home, offering a rehabilitation clinic (PT/OT services), creating a community education series (diabetes clinic, and a post-partum clinic for young mothers), creating a physical exercise program for school age children, and training for the local medical staff regarding the treatment of common conditions to the population (e.g., low back pain, etc.). Each service activity provided a unique opportunity for shared decision-making whether in the delivery of the service or in the planning and preparation of educational and recreational programs. Students were assigned to their service activity post on a daily rotation so that they had the opportunity to participate in each activity by the close of the week. At the close of each day, participants could opt to join the ‘end-of-the-day’ debriefing and group discussion sessions.

Each evening, students and faculty gathered to reflect on the experiences of the day and debrief the day’s activities. The two on-location faculty researchers facilitated these discussions to unearth the lived experience of the participants that day. Students who did not wish to be digitally recorded had the opportunity to participate in a smaller group or one-on-one debriefing with the researchers so that they too could benefit from sharing feelings and experiences of the day. Each debriefing session began with a confirmation of consent with the group and that the session would be digitally recorded. Next, the faculty began with open-ended questioning asking the students to share what they experienced that day. First, the researchers asked the students to identify where they worked that day so that all had context, then what they saw and felt, and the impact the day had on them as rehabilitation professionals. Finally, and continuing with open-ended inquiry, the discussion moved to a series of thematic topic areas around the concept of shared decision-making. Using thematic areas to frame the topics of discussion was felt necessary so that there would be flexibility in reflection and then best capture the varying experiences of the students in the day’s activities.

The recorded sessions were downloaded daily, password protected, and stored for later transcription and qualitative review by the researchers when they returned to Texas. The researchers did not intend to identify student participants by name but anticipated they might self-identify on the recording. Every effort was made to reduce the possibility of identifiers being collected on the digital recordings. The researchers reminded the students not to announce their or any other student names during the discussions. In addition, no comprehensive data set was created that could link demographic information of the students to the digital recordings. The transcripts were typed verbatim, and speakers were differentiated using the nomenclature of Speaker 1, Speaker 2, Speaker 3, and so forth. The recordings were transcribed by one of the participating on-location researchers. To reduce the potential for bias in transcription, the transcripts were randomly pulled and reviewed by a second researcher for thoroughness. All three researchers reviewed the transcriptions independently to extract emergent themes supported by participant verbatim statements.

Researchers One and Two then met to narrow the list of themes. Researchers Two and Three met then to repeat the process. Finally, Researchers One, Two, and Three met to discuss and arrive upon a cogent list supported by verbatim statements or quotes from the participants. A priori themes or those revealed by Researcher One and Two in their pre-week bracketing included: client-centered care decision-making, shared decision-making and collaboration, clinical reasoning, inter-professional collaboration, problem solving and teamwork.

Using Moustakas’ 1994 phenomenological methodology, three-member checking (in 3-steps) was used to confirm the meaning of any dialogue and to unearth themes. The three researchers met at several intervals over the six weeks following the weeklong international service-learning experience to complete the member checking steps in the methodology. These meetings served to debrief, code, and uncover themes. Data results and emergent themes were reported and supported using demographic information as well as qualitative reflections from the participants.

VII. RESULTS

The primary and secondary research questions were addressed through the data collected. Students identified and described shared decision-making in several ways. During the first debrief session, at the beginning of the weeklong experience, initial narratives of sharing were given by describing the steps taken by teams to complete projects. One explained this procedure as breaking down the process... thinking about what I have and where I need to go and what I need to do to get there. Others commented, it was nice having not just you but like the other people we worked alongside like hearing other points of view and um it helped to kinda like reduce bias on our hypotheses. Contributions to the beginnings of a definition to shared decision-making emerged through their use of words when talking about their teamwork: collaborate, and piggyback were frequently used. Several students described the intended outcomes of sharing decisions through thus use of such words as efficiency and a means of prioritizing their work.

Towards the end of the week the students’ contributions to a definition evolved. On the last day, students were asked what decision-making looked and felt like over the course of the week. They were also asked how decision-making affected their service-learning work and its outcomes. One explained, Shared decision-making is talking through each of those steps and seeing how each of us goes through that individually and kind of breaking it down and taking each part and kind of sharing in that process and seeing it from both the OT and PT perspective or if its two PT’s together seeing how each PT works like thinks in each of those
Shared Decision-Making: A Phenomenological Study of Student Service Learning

pieces and putting all of those pieces together of the puzzle. And learning about whatever of the different professions does helps and speak with an OT or a speech therapist whoever is working with your patient to see what kind of goals they are trying to achieve so that you are all working toward the same goal rather than each working on individual goals. And lastly, I think it just makes you holistic in your thinking. I think the collaboration allows you to see beyond just one thing that you would normally look at as an OT or a PT and like inquire more about what the person is going through um look at other things that you might not have looked at in a different way just approach things with fresh eyes because you have two people from different perspectives but still collaborating on the same type of thing. I think it has tremendous long-term effects and in general benefits for that person (referring to the patient) to ah learn from all of us.

When considering the client and the potential for this decision-making approach to impact their care beyond this weeklong service-learning experience, it appeared that the decisions the teams made did, in fact, influence the clients in the on-site rehabilitation clinic as well as at home. Student reflections throughout the week seemed to suggest that the more the team worked together to problem-solve and collaborate, the better the overall result was for everyone involved. Not only did students seem to understand how their interactive dynamics contributed to the continuity of care but so did connecting with their clients with support and affection. The outcomes of this were observed when several community members returned to the clinic multiple times throughout the week to demonstrate their exercises and their progress. In addition, informal feedback was received from one of the members of Potter’s House International (PHAI) who was intricately tied to the community who also returned multiple times and expressed the same.

One important aspect of integrating into the population in Guatemala City was in building trust. It appeared to the students that there was an increased potential for best outcomes for the client when the clients, themselves, were involved in the care.

Service-learning and the context of the experience for the students appeared to contribute to their perspective on inter-professional collaboration and to the value added in working with other professionals to problem solve, and coordinate efforts. This was reflected by one student who, when commenting on communication with a local client mentioned: "It was just like a very big team effort with everyone trying to figure out what words were the right cues what words she knew because when you do come into Central South Latin American region there are so many different words for one American word because there are all these different languages and dialects that you never really know.

Flexibility was mentioned often when considering the setting and service-learning. Students reflected throughout the week and demonstrated both personal and professional growth in their thinking and in their practice as well as in their sense of self and team; I think it’s important to understand like we have our own like idea of how something should be run or the best way a person should be treated or the way a wall should be knocked down um but I’ve found that being flexible and I understand that my way is not the only way and to take on the ideas of other people...is a lot less stressful...so it was good learning experience to just go with the flow rather than to try to be in charge of everything all the time.

The final focus of this study was to understand the lived experience of students in shared decision-making. Students shared their perspectives and reflections throughout the week in response to the nightly debriefing discussions. They shared laughter and tears when speaking about their work, the population, and the severity of living and working conditions. Students were touched by how big an impact they had on each other, and even more so by how much the personal connections made with the impoverished community impacted them in general. One student reflected: "I had never seen her before she had never seen me and so she like just came and put her arm around my shoulder and just said a bunch of these prayers and I think it goes to show like the effect like that it could have on somebody and maybe like how it translates that into your practice. Cause for me I was like oh my God this is like so nice like this is so awesome.

VIII. DISCUSSION
Effective patient-centered care demands that the healthcare team place the patient at the heart of decision-making; likewise, the patient/client is seen as a member of the team, too. Shared patient-centered decision-making (SDM) focuses on collaboration with the patient/client when determining or creating care plans. Interprofessional shared decision-making includes collaboration among different members of the health care team in addition to the patient/client and considers cultural as well as held beliefs and values of all members of the team.

A review of the literature revealed that several studies have been performed examining the cultural experiences, educational benefits, program development, and clinical reasoning of participants while engaged in interprofessional service-learning experiences. The literature suggests that there are more favorable outcomes in overall care for patients who not only contribute to the decision-making process but who have a fully collaborative interprofessional health care team. These favorable outcomes are
Shared Decision-Making: A Phenomenological Study of Student Service Learning

directly linked to buy-in and adherence of a patient to their care plan as well as any education to improve understanding of all aspects of the medical process, including their identified pathologies, illnesses, conditions, or task impairments. Continuity and carryover by the patient or client have also correlated to health care team member involvement and a decrease cost of care when all members of the health care team, including the patient, are acting as one with a clearly defined focus and plan of care available to all.

Although not the focus of this research, results demonstrated a propensity for an additional element of value in this experience: the contribution of shared decision-making to interprofessional education (IPE). The students frequently reflected on their experience in collaborative service work and how it increased their understanding of each other’s professions and professional roles. Again, while not the focus, there seemed to be some learning that took place through collaboration and exposure.

Throughout this service-learning experience the researchers reflected on the potential for future research to investigate how the decision-making process would evolve without authority present. In the context of this experience, a supervisor, whether faculty or licensed clinician, was present to guide students as needed for the safety of both the students and the community they were serving. While patient safety should be a consideration of future research, consideration should also be given to finding ways to evaluate these processes without the direct influence of guided, qualified clinicians.

In addition, it could be important to look at what shared decision-making does not look and feel like; understanding too that both service-learning and decision-making do not have to occur via group effort. Looking at each independently, or on an individual basis could provide an opportunity to determine the definition of decision-making of a health science practitioner acting alone and then to examine outcomes of both individuals and then of health care teams. Finally, it could also be important to investigate the role of the family and/or family system and culture in the decision-making process. From a cultural perspective it could be important to determine how much occurs within this community in a collective or communal fashion absent the presence of a health care practitioner.

CONCLUSION
This learning experience was mutually beneficial to the students as well as potential future patients and clients as a better understanding of the roles each professional plays(ed) in recovery led to an increase in collaborative practice as well as referrals to a specific practitioner or other services to meet their goals. These outcomes and conclusion correlate nicely with published service-learning research focused on IPE [33-36, 24, 37]. Occupational Therapy and Physical Therapy students in this international weeklong service-learning experience in an underserved population in a third-world country were able to articulate a definition of shared decision-making for themselves and for the researchers.

Shared decision-making was described by students on several levels, which contributed to a broad description of the concept. Thoughtful reflection from the students identified processes whereby a collective problem-solving conversation contributed to responses to address the broader need of the patient and client, and the community. Problem-solving, planning, and piggybacking of ideas also appeared to enhance confidence in decision-making and as their service-learning experience progressed.

Not only did the creation of a definition describe their shared decision-making process, but it also gave meaning to the process in the context of the experience itself. Continued qualitative research in this context will only aid to further our understanding of the outcomes of decision-making as a shared process and improve effectiveness of interprofessional practice.

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Shared Decision-Making: A Phenomenological Study of Student Service Learning


Shared Decision-Making: A Phenomenological Study of Student Service Learning


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