

Reflective practice in an Osteopathic student clinic – A pilot study

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November 2004

This research was undertaken for the purpose of completing the curricular components necessary to obtain a Masters in Health Science at the Victorian University, awarded by the Faculty of Human Development

This research format adheres to the publishing requirements of ANZAME (The Australian and New Zealand Association for Medical Education.)

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Acknowledgements:

With thanks to my creative, academic supervisor Annie Carter who supported me, in the midst of many mind fogs. She assisted me to clarify and identify key components of the research. Her easy going approach made the research 'almost' a pleasurable experience. Surely, she must concur with me that it was at times, a nebulous and yet profound topic.

Thank you to those who participated in the interviews, whose input was rich and invaluable as the basis of this study.

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Abstract

A variety of healthcare professions have debated methods of implementing reflective practice in academic curricula. Reflective practice serves as a means of accessing cognitive and behavioural patterns of clinical skills that competent professionals use in their daily lives. The Osteopathic profession has yet to engage with this concept. This study was conducted in an Osteopathic clinical setting and used a qualitative research method of ethnography and semi-structured interviews to investigate memorable clinical experiences. The analysis of the study described the role that reflection can play in the process of developing Osteopathic students and clinicians, in the Osteopathic clinic at Victoria University. An understanding of common issues and concerns of clinicians and students were explored. The actual interview process itself proved to be an effective tool for reflection as participants reported an increase in self awareness as a result of participating in the interviews.

Key Words;

Reflective Practice, Ethnograph, Osteopathic clinic

Background Literature

Philosophers, educationalists and practitioners have been exploring the meaning of reflection since Aristotle first introduced the concepts of practical judgment and moral action (McKeon, 1974). Despite this long history, conceptionalising reflection and reflective practice has proven to be problematic as the process is nebulous and multi-dimensional. There are no accepted models that epitomize a gold standard of what it is to be a reflective practitioner or how best to use reflective practice.

What is Reflective Practice?

Schön (1983; 1987), was one of the first social philosophers to articulate a theory that captured the intangible element of what professional knowledge is and how it is acquired. He proposed a theoretical framework which provided an explanation of a cognitive process inherent in acting and developing as a professional.

Schön's (1988) model of reflection served as a basis to understand some of the processes of critical thinking, and deeper levels of learning, that become second nature as the practicing professional experiences diverse clinical situations. Schön distinguished between two forms of reflection, which were reflection-in-action and reflection-on-action. He defined reflection-in-action as 'reflection on phenomena and on one's spontaneous ways of thinking and acting undertaken in the midst of action to guide further action.' Cole (2000) extended this definition having described it as a dynamic process of reviewing actions in the midst of the practitioner's performance without

interrupting those actions. By way of contrast, reflection-on-action is described as a cognitive post mortem, which includes reflection on reflection-in-action, where a practitioner reflects on an individual lived experience after the event to further explore its meaning and in order to guide future practice. Schön (1983) identified the conceptualisation of reflection as an epistemology of practice.

Boud (1999) claimed that students cannot be expected to become competent professionals unless they learn to be actively involved in constructing and reconstructing notions of good practice as they proceed. Eraut (1994) believed that reflection is about attaining critical control over the more intuitive parts of expertise.

Clinical reflection can be considered to be about recognising areas of uncertainties, doubt, discrepancies, even dilemmas, and questioning why these have come about and then considering how to address these situations for the betterment of self and the provision of care in practice. It is making what competent professionals do a conscious process. Learning experiences themselves do not guarantee learning but, using a process of conscious review to search for meaning within the experiences, a form of conscious learning may be promoted. (Higgs & Titchen 1999, Schön 1987, Boud & Walker 1991)

Several key educational theorists have analysed the concept of reflection by defining the cognitive processes, practical domains, levels of reflectivity and prerequisite skills that are involved in reflective practice (Kolb & Fry 1975; Van Manen 1977; Mezirow 1981; Boyd & Fales 1983; Boud, Keogh & Walker 1985; Schön 1983 & 1987).

The process of 'learning -to-learn' to become a professional, is recognised in a variety of healthcare professions. Some of the professions that have embraced the idea of reflective practice include: education (Enwistle & Ramsden 1983), nursing (Johns 1994), physiotherapy (Cross 1993 & Routledge, Willson, McArthur, Richardson & Stephenson 1996) social work (Boud & Knight 1996) and medicine (Scott 1996). Research undertaken into the benefits of reflective processes revealed findings which according to Engel (1991) include: understanding the levels of learning – superficial versus deep, the opportunity to develop higher cognitive skills such as critical enquiry and encouraging a deeper learning approaches.

Knowledge

Whilst core educational competencies are sound building blocks for a profession, there is a recognisable gap between what is learnt in a static educational institution compared with what is learnt in the reality of practice in unique clinical situations. Higgs and Titchen (1999) succinctly compared propositional knowledge (knowing that) with non-propositional knowledge (knowing how). Propositional knowledge is based in academic rigour that is espoused by research and can be verified by formal and logical relationships between constructs and concepts. Non-propositional knowledge is derived through experience and practice. It is the tacit or intuitive ways of knowing which are implicit in the practice of a professional. Schön (1988) termed this the 'artistry' of a profession which is gained through experiential cycles of learning and enables professionals to effectively act.

Research Design and Methods

Objective

The purpose of the research was to identify and describe the role reflection can play in the experiential processes of Osteopathic students and clinicians; to gain an understanding of common issues and concerns of clinicians and students; and to understand if participants in the study perceived increased self awareness as a consequence of participating in the study.

Given that no similar research has been undertaken in the field of Osteopathy a qualitative methodological approach was deemed to be appropriate as a means to explore the research questions.

The research was undertaken as an ethnographic analysis of the Osteopathic student clinic. Ethnographic research refers to the study of the ways in which groups of individuals share expressions of culture, common understandings of phenomena or human experience. This method emphasises the group experience and the communally ascribed meanings to selected experiences (Wolcott 1999). Ethnography has been considered part of the naturalist paradigm of research (Price 2004). This means that there is a concern to discover the nature of experience and the different ways in which people live their lives. It is argued that the aim of the researcher, in such a method, is not to prove how all others will behave under similar conditions, but to map or illustrate human experience (Lincoln & Guba 1985). Many ethnographers also conduct their research while fulfilling a formal role in the chosen environment (Price 2004). Similarly for this

research as I am a fifth year osteopathic student, I was able to simultaneously be a participant and an observer in the teaching clinic. Consequently I had access to the cultural conventions and social predicators implicit in the day to day experience of being a student or clinician.

Measures

Six face to face, semi-structured, in-depth individual interviews were conducted at the premises of the Victoria University Osteopathic clinic. Individual interviews were used as they tend to be more useful for evoking personal experiences and perspectives, particularly on sensitive topics (Judd, Smith & Kidder 1991). The interview questions were devised to serve as a guideline for the interviewer to direct the line of questioning, they were used flexibly. The interview was a form of discourse, constructed jointly by the interviewer and respondent (Mishler 1986).

Before being interviewed participants were asked to recall a memorable clinical experience. This concept originated from Tripp (1993), who believed that thinking about significant events, often has much to tell us about the underlying trends, motives, and structures of our practice. Tripp (1993) stated that an incident can appear to be 'typical' rather than 'critical' at first sight, but is 'rendered critical through analysis' and has used this methodology successfully to stimulate discussion about reflection. Tripp (1993) termed this process reflection on a critical incident. Brennon and Green (1993), stated that the questioning around the incident 'tends to interrupt or bring into focus the taken for granted ways of thinking and doing and valuing, theorising and writing' and went on to describe it as 'a moment that sparks a deconstruction effect - a moment that pulls apart

that normal or natural approach to doing something' thereby offering a means to interpret what has occurred. Tripp (1993) stated that 'interpretation is important because we act according to what we think things mean.' It has been used in the medical field as a means to deconstruct critical incidents especially in acute care and is promoted as a reflective tool in educational institutions (Brookfield 1990). Using a memorable experience also served to access what Schön (1983) termed the 'indeterminant zones' of practice which are those that do not yield to technical or familiar solutions and yet are of vital importance to the education and development of professionals in the 'climate of rapid technological, cultural and economic change.'

Semi-structured interviews

The interview was designed to lead the participants through a process of recalling and interpreting the chosen event, effectively a shared post-mortem of a memorable experience. Furthermore, the interview enabled the participants to reflect on their past action, to understand what it was about the event that made it memorable (eg, In what way did the memorable event challenge the participant?) The interview was structured to serve as a reflective tool with open ended questions formulated to access cognitive processes (eg. What did the participant see, think or feel?) and subsequent actions (eg. How did the participant cope? What did the participant do or say?) A sequence of cognitive and behavioural components were developed by asking the questions in relation to situational occurrences during, midst and after the memorable event.

The interviews were audiotaped, and transcribed by the author. The transcripts were subsequently given back to the participants to read and authenticate. The interviews were

approximately between 30 to 40 minutes in duration. The transcriptions were then subjected to three -four close readings and emergent themes categorised and described using qualitative analysis procedure (Miles & Huberman 1994). Using Microsoft Word, comments and illustrative quotes were drawn from transcripts and presented in the discussion section.

Participants

A total of six participants were selectively sampled. Four mature age students with prior degrees (a male and female from fourth year and a male and female from the fifth year) were selected to gain insight into the reflective thought processes utilised by the neophyte practitioner in the clinical context. Two clinicians were selected to provide a contrast with the students and to gain an educational perspective of the clinical setting. Overall, three females and three males were selected for the interviews to explore any gender differences in narratives and responses to events

All four students were mature age with three out of the four having completed study at other institutions. A recent study by Wilkinson, Wells and Bushnell (2004), showed that age at entry to medical school brought certainty and motivation about career choice whilst a prior degree had some effect on approaches to studying and cooperativeness. It was expected that the mature age students, selected for the study, would have had a greater range of life experiences and consequently increased self-awareness in a clinical setting.

The qualified clinicians, having worked in private practice for over five years, were also purposefully sampled as the most senior examples of male and female clinicians who are generally well regarded within the Osteopathic community body.

Participants fitting the study's criteria were limited and were purposefully selected for the interviews. The clinicians and students were invited to participate via an informative letter. All of six of the initial invitees formally consented to participate.

Understanding the student Osteopathic clinic

At Victoria University, the Osteopathic medicine course is a five year program which combines conventional academic content and a practicum component in which students learn to develop and apply professional skills. The Osteopathic clinic at Victoria University provides an opportunity for learning that is based on immersion in experience. Second year students observe the fourth year students treat and are responsible for some basic administration procedures. The third year students observe the fifth year students as they treat patients, and may assist in the treatment process by writing case notes. By the end of the academic year the third year students are expected to start being responsible for structuring autonomous treatments. Each student, regardless of year level, works in a paired group mentored by a more senior student and with frequent discussions with the supervising clinician during, and after, each patient consultation. Patients come from a cross section of society including the city business district, as well as those that travel to the clinic from the outer suburbs.

The clinician, who has at least five years of experience in private practice, is a key component in the generation of Osteopathic professional behaviour via a mentoring program. The clinician is the immediate supervisory contact during, and after, a patient consultation. Clinicians typically question and comment on a student's diagnostic reasoning, application of appropriate techniques and overall approach. The clinician, in the role of facilitator, acts as an educator by offering ideas and reinforcing knowledge, (both theoretical and practical) in informal conversations. Informal education is driven by conversation and by certain values, assumptions and commitments set not only by the professional body but also by the institution in which the educators operate.

Educational methods such as unstructured interviews and participant observation are the predominant tools used. Clinical learning is approached as an 'empowering process' with the responsibility for learning based with the student and clinician. It is conducted with the greater aim of the student learning how to emulate the competent professional.

The student clinic is a microcosm for the assimilation of the knowledge and culture of Osteopathy. Each new patient interaction offers the student an opportunity to add to their repertoire of clinical responses. Becoming an effective practitioner requires developing solutions to health care issues that are not merely the application of learnt protocols. The complexity of providing wholistic care means that there maybe many answers to a single issue. The ability to interpret and creatively respond to unique and unpredictable situations, relies on healthcare practitioners being able to 'cultivate a kind of artistry' (Schön 1988), to think on their feet and provide decisive action based on logical problem solving skills.

In terms of the educational context, the Osteopathic clinic is situated in the midst, both figuratively and physically, of an orthodox academic environment where propositional knowledge (that is knowledge derived through scientific rigours of research and scholarship, Higgs and Titchen 1999) is given heavy emphasis in the early years of the program. The positivist philosophy, manifest in part as evidence based medicine, which underpins the academic subjects is in contrast to the contextually specific, nuanced reality of clinical experience.

Discussion

Three areas of discussion ensued. The first part of the discussion entails examples that typify a memorable event. These are discussed to gain an understanding of the types of events that proved to be challenging for those practising in the clinic and they give some insight into the less tangible elements of becoming a professional. Secondly, the interview technique was deemed to be an effective tool to discuss memorable events in a wide range of contexts. Emergent themes were extrapolated to understand the benefits of participation in the interview process. Thirdly, an overview of other clinical issues and recommendations for further research are presented.

1. The memorable event

There were considerable similarities in interviews provided by participants with similar experiential backgrounds. Both fourth year students recalled events that related to their developing competencies, especially their ability to problem solve and the application of appropriate practical skills. The memorable event served as a pinnacle for highlighting an

increase in their confidence via successful application of academic and practical knowledge. Following is an example of a student's memorable event.

He (the patient) came in because he was having numbness and tingling down the outside of his arm and lateral one and a half fingers. He had been treated for a while but no one could really get rid of it.

The student was able to resolve the patient's problem by seeking advice from clinicians and lecturers and he applied his practical and academic knowledge to problem solve. When the student was asked about how the incident had made them feel the response was,

Good actually. Yeah, it was one of the first patients (of this student's) to get a good result from treating. Especially, after four weeks of not getting any results, to see him improve over the next weeks was really good

Both fifth year students were concerned about communicating and interactional components of dealing with patients. A confronting event was expressed by a fifth year student who discussed that,

One of the most amazing learning experiences that I have ever had in this clinic was (when) it was really busy ...and I saw a patient who I normally treat, sitting in the waiting room. I came over and called her name (to enter the consultation room) and (the patient) said, oh no, not you. I don't want to be treated by you the last treatment you gave me was rubbish.....

The student explained that the incident reinforced the importance of trying to cope with confronting situations that are not described in any textbook. The student believed that if they had have used clearer communication techniques, that is by clarifying client

expectations earlier and more effectively, the patient may have been less resistant to a follow up treatment. This incident prompted the student to establish an on-going pattern of seeking clarification of each patient's expectations.

The process of recalling a memorable event served to highlight discrepancies or dilemmas in practice that had made the student or clinicians revise their normal mode of operandi to gain a new perspective of the clinical situation. The memorable event typically provided a moment that challenged the individual's cognitive processes and provided a stimulus for change. These two cases emphasise that the challenging situation can be very different. They can be associated with a developing problem solving capability by a younger more inexperienced student, or be a more challenging personal event which was a stimulus to question the basic assumptions or beliefs, as exemplified by the older more experienced student and also by the clinician. By articulating the memorable experience the interviewer is given access to the learner's assumptive cognitive patterns as well as their established behavioural paradigms.

2. Interview Outcomes

Self Awareness

a. Assumptions and beliefs

The interview process itself, generated a humanistic review of individual's beliefs and assumptions by discussing perceptions and interpretations of the memorable incidents. Personal insight into judgment values, underlying assumptions and beliefs emerged. A younger student gave an example of a situation in which they were asked their opinion

about how best to deal with a patient. Due to their lack of experience and knowledge the student was unable to contribute to the conversation. However, the incident initiated awareness that the student had a choice to become involved in a process of searching for optimal answers to the presenting clinical problems. He chose not to be a passive learner.

... one of the more senior students asked, what is your opinion, what do you think is going on here? And I (the student) have (sic) sort of sat back and thought, well, I really don't know what is going on here ... now after completing this interview...it reinforces that I wanted to become involved I just wasn't sure how

This can be compared with another student who was able to discern that they had presumed that a patient would easily be able to interpret a commonly used set of instructions. When the student returned to the treatment room, the student discovered that the patient had misinterpreted the instructions to put on the treating gown as an instruction to completely disrobe. The student stated that:

... because of the patient's age I made the assumption that (the patient) would have enough life experience to know that is the way things go. It was a big assumption and it has changed my perspective of how to classify people and how I ensure that the patient has comprehended what I have said....

Again, this example reiterates the importance of understanding basic assumptions and beliefs so that poor communicative situations are avoided.

b. Introspection

The interview provided a model for the process of introspection; it helped participants question more deeply their thoughts prior to acting. A clinician discussed a case of a student who was having difficulty grasping the concept of problem solving. The clinician identified that part of the issue was that the student was of a similiar age. The clinician stated that it was,

... difficult to really talk to someone as a superior, to someone who is actually your own age is much harder, it is much easier when the student is a 21 year old because they tend to take it better, I mean, the older student has had a lot of life experiences... (and) to be told be someone who is their own age that they are failing is really difficult to cope with....

By acknowledging the discomfort felt about this situation the clinician was able to acknowledge that the belief that being of a similar age meant that it was more difficult to offer critical feedback. The clinician formulated alternative ways of dealing with the student by adding more tutorial sessions that involved peer feedback.

One of the clinicians was asked if the interview process had helped in any way and the clinician responded that,

you actually get to think about it more, when you are asked questions you have to think about the whole process and what you have done, I mean that question that you asked me, 'would I have changed anything now and done it better?' you know,

I thought ... well, could I have done it better, could I have changed anything?

This concurs with Boud (1999) who articulated that 'it is only when we bring our ideas to our consciousness that we can evaluate them and begin to make choices about what we

will and will not do'. In this case the interview question made the participant question their ideas. It provided an opportunity to make conscious a cognitive process of evaluating their action.

c. Acknowledging the subjective component of practice

In all healthcare settings there are situations that confront practitioners personally. In this study I found that the students and clinicians use a trusted source such as a critical peer, friends, partners and respected mentors to act as a sounding board for assessing if their ideas and actions are appropriate and optimal. The study highlighted the lack of structured opportunity to express or recognise emotional, non-objective or personalised responses for the students and clinicians in the clinical component of the course. For one participant, the interview offered them the opportunity to discuss events that had been perturbing them for some time and which they had attempted to suppress. This is exemplified in the following excerpt,

... it (the interview) brings up things that you are most deeply concerned or worried about but on the surface you block

The interview gave this participant an opportunity to acknowledge feelings and emotions and to understand the impact they had both at the time and long after the event.

Feelings and emotions are an important component of clinical interactions. For example, a situation arose where anger was strongly felt by both a student and clinician. The student was angry for feeling that they did not receive enough guidance in a case with an patient who had acute lower back pain, whilst the clinician noted that there had been

miscommunication involving two clinicians giving opposing advice. After heated discussion and chaotic interactions the clinician in the interview stated that:

I probably should have sat down with (the student) and re-thought it with (the student) but I chose to forget it....

It was also noted that the other clinician involved avoided the student due to the anger associated with the incident. Using an objective format, like that of the semi-structured interview, to reflect back on such an event may enable both parties to clarify processes and discuss emotional reactions, and possibly to understand their expectations of behaviour and even the basic assumptions that shaped their expectations.

Thus, by structuring a format for people to articulate their feelings as part of the interview process it allowed the participant to diffuse the weight of their emotional reactions.

...it (the interview process) makes you feel better that someone else knows that you really made a big bungle of something that really isn't a bungle....

The participant noted that the interview process was a means to articulate such feelings and the opportunity to reflect on the event resulted in them recognising that the situation was not as terrible as they had initially believed.

d. Recognition of developmental landmarks – a means to self evaluate.

Undertaking the interview gave the students the opportunity to understand and identify their own developmental landmarks. This is exemplified by a student who was asked if

the interview process had made them think any differently about what they had done. The student responded,

Yeah, in having thought about it you actually look back and see that there is a structure to how I am improving (as an Osteopath). When I (the student) had first started to treat I was just throwing it together but looking back now makes me realise how much I have improved over the last six months....

Via the interview the student gained insight into their technical improvement and a process of self awareness occurred. Becoming aware of, and being able to articulate, personal developmental progression may serve as a tool in self evaluation.

The breadth of responses about the interview process itself highlights that it is an effective tool for any practitioner, either novice or experienced. It also reinforces the value of providing a forum for open ended questioning that prompts a means for self review.

Identifying the Interview Process

Factors that were found to be constructive for the interview were skills commonly associated with that of basic counselling. These micro-communication skills used in counselling are: one-on-one, face to face interviews in the privacy of a clinic room; formulating open-ended questions pertaining to the memorable event in which facts and feelings are separated, encouraging exploration of themes; creating a non-judgmental milieu by being aware of self prejudices, acknowledging prejudices of others; using effective listening techniques — paraphrasing responses, eye contact, mirroring body language, summarising main ideas/concepts, observing yourself as a listener.

Other clinical issues and recommendations for further research.

Recognising educational landmarks for clinical development.

Given that the fourth year students were concerned with increasing self competence, whilst the fifth year students were concerned with interactional issues, the memorable incidents served to pose further questions about the role of educational models that could be applied in the clinical setting. Psychologists Skovholt and Ronnestad (1995), developed a "Model of Therapist Development" which proposed an eight stage model of professional development from novice to experienced practitioner. The model described the predominant ways of learning at each level of experience, by describing the characteristic behaviour exhibited. The authors concluded that the development of the professional involves a movement from reliance on external authority to reliance on internal authority - a process of professional autonomy. According to this model, the student in the fourth year will be reliant on modelling and introspection as the key methods of learning. As they become more experienced, students will act by imitating experts (clinicians, lecturers, successful professionals) and proceed to conditional autonomy (developing and refining their mastery of conceptual ideas and techniques) and by exploring (moving beyond what is known, rejecting previously held ideas and models). The nature of the critical incidents revealed that the learning processes in the Osteopathic clinic adhered closely to this model. Presenting a general learning model in the clinical setting may allow access, for both clinicians and students, to developmental landmarks.

The Value of Experiential Learning.

The value of experiential learning was echoed throughout the interviews. One student captured the importance of the real life learning they experienced in the clinic by stating that,

...there is not a class here that teaches you how to handle this. It's just the experience of going through it....the clinic definitely exposes you to it....

This infers that not all components of becoming a competent professional are concrete and teachable. By trying to capture some of the less tangible elements of what it is to know osteopathy, and what the specific osteopathic goals of knowing are, it may be possible to determine an understanding of what a professional osteopath is. By being aware of how the profession comes to know individual Osteopaths will be more able to discern the basic values and assumptions that are part of the Osteopathic practitioners' knowledge.

A question of evaluating processes for the student Osteopathic clinic

The open experiential learning process of the clinic is variously evaluated. The clinicians measure their worth by

...(students) wanting to be in my (the clinicians) clinic shift, or passing/receiving informal comments like

...your (the clinicians) students seem more structured in their approach.

Three students often feel that they don't get enough formal or structured feedback.

However, the students understand that the responsibility to get feedback lies in their domain as exemplified by one student who stated

... I knew that I had to search out the clinician or fellow student (peer) or someone to help me understand if it was the best of way of going about it (the treatment).

This example indicates that, as a process of becoming autonomous, students need to acquire ways of measuring themselves. To encourage and develop the student to act in an autonomous professional manner it is imperative that methodology about evaluating practice is given further deliberation in the Osteopathic clinic. Given the subjective nature of autonomous practice, a process like that of self reflection within a 'critical' group of peers would be one step to understanding how to measure ones self as a student, clinician and professional.

Status of the clinical educator

As discussed earlier there is a pre-existing dichotomy in the types of knowledge that students are aiming to acquire. Ghaye and Lilyman (2000) posed the question that if the experiential practical component of learning is judged according to those imposed by educational values, an undervaluing of the process may occur. This in turn may lead to a devaluation of the educators who are key participants in that system. A sense of this frustration was depicted in the following statement by one of the clinicians:

...clinical tutoring is the Cinderella of the whole establishment. It is poorly paid and...the whole clinical thing I think, is seen as a secondary thing to everything else, when it should be the most important thing....

Perhaps this sense of frustration is based on the dichotomy created by the educational milieu. Higgs and Titchen (1999) stated that there is a hierachical relationship that has evolved between propositional knowledge and non-propositional knowledge, with the former having the higher status. Schön (1985), succinctly questioned the dichotomy of such a structured system of education wondering if it 'creates an oppressive hierarchy in that academic knowledge is viewed as more important than practical knowledge.'

As the two diverse learning models, that is, the experiential model of clinical involvement and the scientific evidence based component, are of academic worth, this study poses the question- how can the two systems become integrated?

One of the clinicians believed they were expected to know as a practicing Osteopath, what it is to be a competent professional. This presupposes that the assumptions and values that underlie the behaviour and thought processes of being a competent Osteopath are well articulated, and widely disseminated. It is imperative that these values and commitments are transparent to those who participate so that a baseline is established and outcomes are more tangible to those who participate in the system.

Limitations of this study

The small number of interviews that were conducted makes it difficult to generalise about the results. It may be argued that the sample is not large enough to draw any conclusions, but it does serve as a template for further enquiry. This study is broadly descriptive and offers a general overview of some of the main ideas raised. Further analysis of the data, for gender and experience related differences, may elucidate interesting information but this was beyond the scope of the work.

Admittedly, this was my first qualitative study and I found that with more practice I became more succinct at the interviewing process.

As a student participating in the clinical setting, it was difficult to maintain a researcher's perspective when one is immersed in the real life constraints of fulfilling course requirements. Therefore, the ethnographic scope of the research was somewhat limited and information gleaned in the interviews was given emphasis in the discussion.

The selective criterion for participants was limiting and ultimately data comparing experiences of institutional setting was not consistently gathered and therefore not analysed.

Ultimately, the research was limited to one element of reflective practice - reflection on action about practice. Further investigation of some of the more transient and subtle adaptations to cognitive processes and behaviour of reflection in action may prove insightful for understanding elements of how novice practitioners learn and interact in the clinical setting.

Summary

This pilot study found that by using a semi-structured interview approach, to explore reasons for and reactions to memorable experiences, insight into a range of learning issues arose. Skills that were identified for promoting effective reflective practice are self-awareness, description and synthesis of a memorable experience, sequential analysis of the events, and peer evaluation.

Using the interview as a reflective tool promoted an understanding of assumptions and beliefs, offered a means of introspection, gave participants the opportunity to recognise developmental landmarks and gave a structured format to acknowledge the subjective humanistic quality of practice for the purpose of self-awareness.

The interview process was a foundation to explore some of the intangible processes we use to become professionals that are not dealt with in the academic program but are inherently important in the day to day experience of a professional. The interviews were not cumbersome techniques to implement in a clinical environment. This study found that in order to initiate reflection in a clinical setting, the key requirements were: an informed observer, a non-judgmental manner, and a self selected memorable clinical experience. The communication skills required for undertaking such an interview process, (namely asking open ended questions, effective listening skills and creating rapport) would be simple to integrate into a clinical reflective structure as they are currently taught as part of the osteopathic undergraduate curriculum.

It is important that reflective practice, as a tool, is consciously woven into everyday clinical practice as it offers students and clinicians a means to deconstruct and reconstruct knowledge about the process of practice. This research suggests reflective practice offers

a learning process in the clinical environment that allows for a more cohesive understanding of the unpredictable nature of practice. As autonomous practising professionals, osteopaths constantly face new dilemmas in practice. Most importantly, this study serves the purpose of raising awareness of the concept of reflective practice within the osteopathic clinic to initiate discussions about a foundation to construct an awareness of a process that conflates theory and practice.

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