Educational Perspective

Fostering the development of professional identity within healthcare education-interdisciplinary innovation

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ABSTRACT

Introduction: Historical theories on development of professionalism are no longer sufficient in modern radiation therapy or radiography curricula with the focus moving from 'virtues-based professionalism' to 'professional identity formation'. Professional identity formation is a new concept that is described as a transformative journey from being a layperson to 'becoming' a professional. Knowledge, values, and behaviours are transformative and unique to each individual.

The overall aim is to produce a consensus statement outlining evidence based programme initiatives to support healthcare students' professional identity formation.

Methods: 'Think tank' methodology was used for individual and final combined group reflective tasks to enable the creation of an evidenced based consensus statement. Participants discussed their personal views and beliefs regarding the process of Professional Identity Formation for teaching, learning, assessment, and evaluation. Discussions were recorded, transcribed, and analysed using thematic analysis from an interpretivist perspective. 'Think Tank' participants were asked to attend masterclasses to gain a greater understanding of professional identity formation from leading experts before the final combined 'Think Tanks'.

Results: Faculty and students across all Disciplines (N22) within the school of medicine attended the 'Think Tank' sessions.

Discussion: During each student's transformative process of professional identity formation, healthcare educators need to create evidence based pedagogic opportunities to support them. It is no longer suffi-cient to leave to chance within a 'hidden' or 'informal' curriculum. Professional identity is more than a set of learned behaviours that are assessed within the clinical environment.

Conclusion: The development of this consensus statement is an innovative educational strategy that will ultimately enhance the education of professionalism in the clinical environment for radiographers and radiation therapists. Through seeking an understanding of the educational needs of students and faculty, the multidisciplinary team were able to create a tailored approach to professional identity formation within the institution. This student-faculty partnership is unique and beneficial to all parties involved and is an effective method of seeking a shared understanding.

RÉSUMÉ

Introduction: Les théories historiques sur le développement du professionnalisme ne sont plus suffisantes dans les programmes modernes de radiothérapie ou de radiographie, l'accent étant mis non plus sur le "professionnalisme fondé sur les vertus" mais sur la "formation de l'identité professionnelle". La formation de l'identité professionnelle est un nouveau concept qui est décrit comme un voyage transformateur de l'état de profane à celui de professionnel. Les connaissances, les valeurs et les comportements sont transformateurs et uniques à chaque individu. L'objectif global est de produire une déclaration de consensus décrivant des initiatives de programme fondées sur des preuves pour soutenir la formation de l'identité professionnelle des étudiants en soins de santé.

Méthodologie: 'La méthodologie du « groupe de réflexion » a été utilisée pour les tâches de réflexion individuelles et collectives combinées finales afin de permettre la création d'une déclaration de consensus basée sur des preuves. Les participants ont discuté de leurs opinions et croyances personnelles concernant le processus de formation de l'identité professionnelle pour l'enseignement, l'apprentissage, l'évaluation et l'appréciation. Les discussions ont été enregistrées, transcrites et analysées à l'aide d'une analyse thématique dans une perspective interprétativiste. Les participants au groupe de réflexion ont été invités à assister à des cours magistraux afin d'acquérir une meilleure compréhension de la formation de l'identité professionnelle auprès d'experts de premier plan avant la réunion finale des groupes de réflexion.

Résultats: Des professeurs et des étudiants de toutes les disciplines (N=22) de l'école de médecine ont participé aux sessions du groupe de réflexion.

Discussion: Au cours du processus transformatif de formation de l'identité professionnelle de chaque étudiant, les éducateurs en soins de santé doivent créer des opportunités pédagogiques fondées sur des données probantes pour les soutenir. Il ne suffit plus de laisser faire le hasard dans le cadre d'un programme « caché » ou « informel ». L'identité professionnelle est plus qu'un ensemble de comportements appris qui sont évalués dans l'environnement clinique.

Conclusion: L'élaboration de cette déclaration de consensus est une stratégie éducative novatrice qui, en fin de compte, améliorera l'enseignement du professionnalisme dans l'environnement clinique des radiographes et des radiothérapeutes. En cherchant à comprendre les besoins éducatifs des étudiants et du corps professoral, l'équipe multidisciplinaire a pu créer une approche sur mesure de la formation de l'identité professionnelle au sein de l'établissement. Ce partenariat entre étudiants et professeurs est unique et bénéfique pour toutes les parties impliquées et constitue une méthode efficace de recherche d'une compréhension commune.

Introduction

A key aim of healthcare education is to ensure that students become professionals by developing their own professional identity [1]. The concept of being professional or demonstrating professionalism is a fundamental component of medical, nursing and healthcare education. Whilst not new, our understanding of professional identity development is evolving. Recent studies provide educators with a greater insight and understanding of this complex process [2-4]. Historical theories on development of professionalism are no longer sufficient in modern curricula with the focus moving from 'virtue-based professionalism' to 'professional identity formation' [5]. Professional identity can be defined as how a person sees themselves based on their values, motives, experiences, attributes and beliefs in relation to their profession [6]. It is a highly individual process that is often developed at different paces during an educational programme [7]. Professional behaviours are dictated by the profession itself and the public. Every individual is expected to adhere to this criteria [7]. Students enter professional courses with limited understanding of what it takes to become a professional. Professional identity can be a difficult concept for them to grasp. Most students, begin their personal identity formation in late adolescents or early adulthood [7]. The process of forming a professional identity begins once they begin their medical, nursing or healthcare education. Once on these professional courses like radiation therapy or radiography, individuals begin the socialisation process from 'layperson' to skilled professional [7].

This specific transformation from layperson into healthcare professional is a complex process of learning how to 'practice' and of 'becoming' a professional. Studies within medical and nursing education have illustrated that changing behaviours and beliefs is a key development from 'layperson' to medical/nursing professional [4,8]. Professional identity formation is a complex process that requires integration of personal self and values with those of professional self-norms and behaviours [4]. The traditional method of patterning behaviour after respected role models is no longer solely sufficient to support this reconstruction of oneself [3]. The sociocultural theory of professional identity recognises the impact of both personal and social processes [4,8,9]. The socialisation process involves the transmission of professional values to the next generation of healthcare professionals and must be cognisant of generational differences that exist and shifts in societal expectations [3]. Professional identity formation is described by Wald H [4]... as "*the transformative journey through which one integrates the knowledge, skills, values, and behaviors of a competent, humanistic physician with one's own unique identity and core values*". This development involves transition points where new knowledge, values or behaviours are adopted and others may be retired [10]. Johnson noted the potential for conflict between personal values and developing professional values, as well as dissonance between idealized expectations and the reality of the profession [11]. These transitional stages can often present challenges such as problems of transfer, uncertainty, role identification and stress [11]. Healthcare education research is actively examining how to support students personal and professional formation, with recommendations including building relationships, fostering transferable learning strategies and reflection skills [12,13].

Programmes addressing professionalism (i.e. the shared values, expected professional behaviours and relationships that underpins public trust with professionals) have been developed in order to educate and support the development of healthcare professionals. This explicit teaching and assessment is important, it clearly outlines the societal expectations of a practicing healthcare professional and is one component of guiding

Table 1
Interdisciplinary Group_committee members.

Clinical Speech and Language Studies
Dental Science
Medicine
Psychology
Pharmacy
Physiotherapy
Nursing and Midwifery
Medical Intern Education
Clinical Education Radiation Therapy
Occupational Therapy
Pharmacy, Trinity Education Fellow/ Academic Developer
Student members: Pharmacy, Medicine, Nursing and Midwifery

students to 'become' a professional. Reframing healthcare education around the concept of identity formation allows for a greater appreciation of how individuals become professionals and the socialisation process involved [1]. The expanded objective is to ensure future practitioners have internalised the characteristics and values [1]. Chandran et al proposed that integration of evidence based approaches to professional identity formation within the curriculum may enhance students well-being, sense of belonging within a community of practice and ultimately resilience of the future practitioner [14].

Teaching and assessing professionalism requires faculty members to develop a common understanding of the definition of professionalism and professional identity formation and the purposes they serve. Various definitions exist, for the purposes of this research the following two definitions were used; *"a set of values, behaviours and relationships that underpins the trust the public has in doctors"* from the Royal College of Physicians'; [15] *"a physician's identity is a representation of self, achieved in stages over time during which the characteristic, values and norms of the medical profession are internalised, resulting in an individual thinking, acting and feeling like a physician"* Creuss, 2019 [16].

Students and professionals often have a vague concept of how professional characteristics are formed [3]. An interdisciplinary group of educators from across healthcare specialties at Trinity College, Dublin (TCD) (See Table 1) recognised common challenges when preparing students for their future profession. Research, education and clinical practice often have inter-related issues on professional courses [17]. Sharing of experiences across specialties by professional groups, with various levels of educational responsibility, revealed common promoters and inhibitors of students' professional identity formation. Interprofessional collaboration is defined as when two or more professions work together towards a common goal. Recognition of interprofessional collaboration in patient management, education and research recognises the need to work together to achieve a common goal of new scientific knowledge [17]. The group identified a clear need to create educational strategies to support professional identity formation rather than leave to chance.

The overall aim of this research is to produce a consensus statement outlining evidence based programme initiatives to support healthcare students' professional identity formation. The consensus statement will contain recommendations to inform curricular renewal by relevant programmes.

Consensus statements are used in medical education to generate a public statement on a particular aspect of educational practice that is agreed upon by a representative group of experts in that area [12,13]. Our model of engagement involves clinical faculty, programme directors and students as active participants in reviewing the identity formation process and is a novel approach that will result in the shared creation of programme recommendations from both the novice practitioner and healthcare expert perspectives.

In this paper, the authors provide a brief overview of the methodology in constructing a consensus statement on professional identity and discuss the necessity of re-emphasising the main goal of professional health curriculums including radiation therapy and radiography, to assist students develop their professional identities.

Methodology

This research was approved to be conducted by the participating institution. All healthcare educators and students within the institution and associated clinical departments were invited to participate.

The Head of each discipline and school within the institution were given details of the proposed research and asked to invite all clinical educators and students explaining the focus of the research. Interested parties completed a registration form and then were invited to take part in a 'Think Tank' session. Using a modified Steinert model [3], participants were then asked to attend a Faculty 'Think Tank' or a Student 'Think Tank' (Phase 1). This methodology was used as it brings a diversity of people together and is an effective way to shape policy and reach consensus [18]. Phase 1 allowed groups to consider challenges from their perspective before joining in a larger community forum. The participants were asked to discuss their personal views and beliefs regarding the process of professional identity formation. To identify the core content and processes involved. To distinguish strategies for teaching, learning, assessment and evaluation of professional identity formation. Each 'Think Tank' was 90 min in length and involved a mix of healthcare professionals and students including those in radiation therapy. Ten separate 'Think Tanks' were held with 55 faculty and 22 students (See Table 2), to gather opinions using a structured framework of reflective tasks. Discussions were recorded, transcribed and analyzed using thematic analysis from an interpretivist perspective [19,20], where the professional identitiy formation process is viewed as one where identities are not singular but complex and highly subjective to the individual. They evolve over time,are influenced by many factors and are created and co-created within a social world and enacted by the individual.

The first phase of 'Think Tanks' was to understand student and the healthcare educators perspectives on forming a professional identity in healthcare. Following this phase, faculty were

Table 2
Faculty and student think tank attendees.

Faculty	Student
Clinical Medicine	Dentistry
Clinical Pharmacology	Dental Hygiene
Clinical Speech and Language Therapy	Medicine
Counselling Psychology	Nursing and Midwifery
Dental Surgery	Occupational therapy
General Medicine	Pharmacy
General Practice	Physiotherapy
Interprofessional Learning	Radiation Therapy
Medical ethics and law	Speech and Language Therapy
Nursing and Midwifery	
Occupational therapy	
Paediatric Dentistry	
Paediatrics	
Pharmacology and Therapeutics	
Pharmacy	
Psychiatry	
Radiation Therapy	
Speech and Language Therapy	
Surgery	

invited to attend 5 masterclasses (See Table 3 workplan) by international experts on the theoretical basis, assessment, feedback, remediation and programme development of professional identity formation. Due to the COVID-19 pandemic masterclasses were delivered online. Their aim was to provide participants with an overview of current research of professional identity formation within healthcare education before being consulted on the construct of the final consensus.

Participants were invited to attend a final combined 'Think Tank' (student and faculty-Phase 2) to examine and discuss the key overall themes from the initial 'Think Tanks'. During this process participants are asked to reach a consensus on the final themes with the purpose of creating evidence based guidelines on directed education of professional identity formation within the institution. Once completed, the consensus statement will be presented to all heads of discipline and school for undergraduate teaching. Implementation will start at the beginning of the next academic year.

Discussion

The final themes from this qualitative methodology are currently being analysed after a successful engagement from faculty and students. We feel this innovative educational strategy will ultimately enhance the understanding of how professionals develop their identity, support students in their formation through the re-emphasis and valuing of important educational experiences of all healthcare professionals.

Faculty engagement

Professionalism is a common stated educational objective in healthcare programmes. Healthcare education typically teaches the principles of professionalism by providing students the cognitive knowledge base and then assesses those skills through behaviours demonstrated in the clinical environment [1]. This is a common methodology in healthcare education [21] however research from medical and nursing education would suggest that this concept of teaching professionalism needs to be re-examined [14,22]. To guide students in the formation of professional identity formation development rather than just teach and assess it [1]. As educators we need to build educational strategies and re-orientate them to support the goal of developing a professional identity. This has been developed within some medical and nursing curricula however it is a relatively new concept within healthcare education [2,14,22]. Chandran et al., 2019 theorise that in order to enhance professional identity, medical educators need to be mindful and deliberate in creating pedagogic opportunities for students rather than relying on a 'hidden' or 'informal' curricula [14].

The Stony Brook medical curriculum embeds professional identity formation as a key element of their educational structure, reflecting the philosophy in their cultural engagement, research and scholarships [14].

Faculty are often challenged by the role of supporting the constructive process of identity formation and require a common language for the process and related constructs. The influence of socialisation and the factors that promote and/or hinder in professional identity formation must be clear to learners and faculty [23].
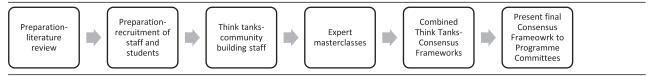
Canvassing of faculty members and clinical educators' views enables the construction of recommendations relevant to today's clinical practice, whereas engagement with international experts facilitates an accepted common terminology among educators which enriches the core 'known' curriculum [14]. By directing the students learning into the 'known' curriculum, it is expected to reduce negative influences of the 'informal' or 'hidden' curriculum. 'Informal' or 'hidden' curriculum is referred to as the learning that takes place outside the 'formal curriculum' and therefore outside an existing framework [24]. Instead the focus is on augmenting positive clinical experiences for students through purposively strengthening their relationships with peers, clinical role models and patients [14]. Through this shared vision clinical educators can become better role models and mentors [16].

Challenging and guiding students in the development of their professional identity should happen from the beginning of their programme. Engagement with students is based on the guiding foundation supplied by faculty and clinical educators. Faculty will become more alert to possible tensions in the professional identity formation process and will be able employ strategies to address these within the formal educational framework and not the hidden curriculum.

Student engagement

Supporting students in their development of professional identities requires more than setting a list of professional outcomes to be assessed. A multi-dimensional model conceptualising the underlying formation of professional identity is required. Educational research suggests that professional identity

Table 3
Workplan for development of consensus on professional identity formation.

| Preparation- literature review | → | Preparation- recruitment of staff and students | → | Think tanks- community building staff | → | Expert masterclasses | → | Combined Think Tanks- Consensus Frameworks | → | Present final Consensus Frameowrk to Programme Committees |

is influenced from the hidden learning experience rather than the existing/formal framework [9]. It is imperative as educators of future radiation therapists, radiographers, allied healthcare, medical and nursing practitioners that we guide this development within our curricula. Wald et al., 2015 identifies three key elements in professional identity formation-resilience, reflection and relationships [25]. Research has suggested that students with a strong professional identity can manage the complexities of healthcare environments as they are aware of the adversity and have the skills to overcome them and continue in their chosen profession [14].

One of the challenges of forming professional identity formation for healthcare students is the transformation from an ordinary person to a professional [25]. Key goals of clinical education is to create a competent professional as it is no longer sufficient just to have excellent knowledge [9] A recent study conducted by O'Doherty et al, 2021 explored students perceptions of professional identity formation and illustrated the importance of medical curricula in its formation [26]. Participants from this study discussed how the design of the curriculum encouraged their identity formation [26]. It is therefore important to engage the students in the design of a consensus statement on professional identity formation that will ultimately contribute to curriculum design within healthcare programmes. It is important that students can advocate for their needs in formation and enactment of their professional identities in complex learning environments that are not always conducive and supportive to them in these endeavours [27]. Students were therefore asked to participate in 'Think Tanks' with their peers so that they could voice their own opinions and thoughts on professional identity formation at a meaningful level without judgement.

Limitations

While this study includes multiple perspectives across the educational perspective it would benefit from a phase that explores the patient perspective through public engagement. The social contract within healthcare is translated into regulations and guidelines of regulatory bodies and are generally aimed at the qualified practitioner [28]. Public expectations of the student practitioner may differ, as may ideas for patient engagement in the socialisation process.

Challenging aspect of this 'Think Tank' recruitment was ensuring a diverse representation of participants. Strategies were implemented to minimise lack of diversity by purposely involving all healthcare programmes and nomination of student representatives to the core interprofessional committee. For future phases of this work, the nuanced perspectives of patients and diverse student population are required for a fuller exploration of identity formation processes.

Conclusion

The development of this consensus statement is an innovative educational strategy that will ultimately enhance the education of professionalism in the clinical environment. Students will be supported in their development of professional identities resulting in professional skills appropriate for future radiation therapists, radiographers and healthcare professions. It is our hope that this initiative can move beyond medical education and also into healthcare education where the skills of a professional are as equally important. The importance of teaching professionalism has not changed however educational theories on the best method of incorporating it into our curricula has. It is imperative that our students can also ' think, act, feel' like a radiation therapist or radiographer [16]. In order to facilitate and support this development, we as educators need to rethink and recreate our curricula and educational strategies to be more effective in creating professionals for the future.

Acknowledgements

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