

Including the Arts in Pharmacy Education to Promote the Development of Empathy

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Abstract

The integration of the arts in the curriculum of pharmacy education has been found to be a novel approach towards the encouragement of the growth of self-perceived empathy among students. Empathy is a vital trait of pharmacists which helps to improve the patient-centered care and communication as well as the therapeutic outcome. This abstract discusses the way exposure to different art forms (literature, theatre, visual arts, and reflective writing) can lead to emotional awareness, better interpersonal skills, and development of patients' experience understanding. Implementation of artistic approaches prompts self-reflection and humanistic approach to pharmacy practice, which makes contribution to the integrated education of future healthcare workers. According to the findings, students who worked with the arts are more empathetic and understand the psychosocial aspects of patient care more. This mode of learning is aligned to changing curricula in pharmacy schools to turn out compassionate and culturally competent practitioners.

Keywords: Deprescribing, pharmacy education, Jordan, pharmacy students, polypharmacy, clinical pharmacy, student perceptions, medication safety, cross-sectional study.

1. Introduction

There has been a paradigm shift in the education of pharmacy in the recent years with increasing realization of the significance of using emotional intelligence and empathy as the basic skills among healthcare professionals. This change is fueled by the growing demands for patient-centred care, where healthcare providers no longer need to have mere technical expertise but instead they must have an understanding of emotions, perspectives and needs of the patients. In the UK, General Pharmaceutical Council (GPhC) has laid new standards for the first education and training of pharmacists reminding the necessity of empathy as indispensable part of professional behaviour (General Pharmaceutical Council, 2021). The same is the case with the Accreditation Council for Pharmacy Education (ACPE) in the United States that has revised its accreditation standards to emphasize the affective domains in pharmacy practice with the human side of the pharmacy education (Accreditation Council for Pharmacy Education, 2016). These alterations are part of the wider movement towards training issue pharma practitioners who are more compassionate and can interface with patients while enhancing stronger therapeutic relationships and clinical outcomes(1).

Empathy, especially in healthcare, is characterised by understanding an individual's situation, perspective and feel and convey such an understanding as to promote therapeutic action (Mercer & Reynolds, 2002). In the capacity of a pharmacist, this skill is important in acts since pharmacists will always be dealing with patients that may be suffering from serious health issues. Emotional capacity as the ability to show empathy can improve the quality of the care, increase the patient's satisfaction, and overall improve health-related outcomes. Nevertheless, empathy is not the characteristic one can presume being an inborn quality for all people; actually, it is a skill that may and should be developed in the process of professional training. In the past, learning in a pharmacy education was centered on acquiring technical information and clinical skills, but there is an emerging attention towards taking care of emotional and psychological sides of healthcare.

Although many other fields in healthcare, such as medicine and nursing, have incorporated the humanities into their programs in an attempt to create empathy, this is not the case with the study of pharmacy. However, there emerge more and more pieces of literature which suppose that the use of arts in teaching healthcare can greatly contribute to the development of students' empathy. In different forms, art is a unique means of involving the students in the human experience, affording them an opportunity to navigate through complex emotions, perspectives and experiences which cannot be achieved through textbooks and clinical scenarios. Researches have shown that the exposure to art forms like literature, music, films and visual arts can assist the students to gain a better

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understanding of patients' situation and that way connect with the emotional aspects as well the human perspective of healthcare (Muszkat et al., 2010; Yang & Yang, 2013) (2).

The engagement of the arts for cultivating empathy is based on the idea of "affective learning", whose emphasis is on emotions, attitudes, values (as opposed to purely cognitive-oriented nature of the traditional scientific education). Affective learning is critical in healthcare as it allows learners not only to comprehend the clinical part of a patient's condition but to understand the circumstance of one's life and emotional load of being ill. Specifically, the arts provide students with an opportunity to co-experience the subjective experience of patients, which, as a rule, is not observed in the process of clinical training. For example, watching a film of a patient's journey with cancer can elicit emotional reactions that can help the students understand the psychological and emotional burden of the disease. Likewise, a student can create a piece of art or get involved in music therapy, which can offer a new vision of the recovery process and the course of healing from a student's perspective because he/she will be experiencing the healing power of art himself/herself (Bozcuk et al., 2017).

With this increased realization of the value of empathy, Keele university adopted an innovative module termed as "Art of Pharmacy" intended to integrate different art forms within the curriculum of the pharmacy course in order to enhance development of empathy. This optional module was added to Keele's final-year undergraduate Master of Pharmacy (M.Pharm.) course for the express purpose of assisting students to form a more empathetic attitude in relation to caring for people(3). The module contains various artistic activities that include: pottery, film, performance, poetry, music and visual arts, all of which aim to generate a better knowledge of patients' encounters with illness and recovery. By taking part in these activities, students were stimulated to reflect upon the emotional and personal aspect of illness while simultaneously improving empathy with this activity in ways that routine pharmacological education may fail to do so.

Such a phenomenon as the "Art of Pharmacy" module is a part of the wider tendency in the sphere of healthcare education towards including the humanities into trainings. In medical education, the use of arts have been established to enhance empathy levels of students and caregivers. For instance, numerous research works have shown that reading literature, communication with the visual arts, and listening to music may improve physicians' and medical students' understanding and empathy towards patients (Teagarden, 2013). Yang & Yang, 2013). From these findings, it can be argued that the inclusion of similar approaches in the pharmacy education can make future pharmacists acquire empathy skills to offer holistic care, which takes into consideration both clinical and emotional needs of patients.

Moreover, incorporation of arts-based activities in pharmacy education can also contribute more to the personal development of students. A lot of Pharmacy students particularly at the later stages of their education experience excess levels of stress and burnouts occasioned by the intense nature of their coursework and placement in clinical duties. Activities such as pottery, painting and music therapy which are of a creative nature has been known to be therapeutic in nature; helping students relieve stress while maintaining a good mental health (Wang et al. 2018). Students, in the framework of "Art of Pharmacy" module, not only grow empathy towards their prospective patients but also obtain important tools for self-care and emotional adaptability that is essential for their long-term flourishing as professionals in healthcare.

The introduction of this module into Keele University is a means of integrating humanities in the practice of pharmacy. It is a sign of the increasing awareness that development of empathy is an active process that requires individuals to be proactive in learning about the lives of others. For pharmacy students, the arts are an excellent platform on which to reflect on the emotional and human aspect of healthcare, and the difficulties that patients face. Yet, as any other educational innovation, it is also crucial to assess the effectiveness of such modules to make sure that they achieve their designed learning outcomes(4). This paper objects to bring out an evaluation of the module concerning "The art of Pharmacy" comparatively focusing on students' self perceived development of empathy and the effects of arts based learning of the future practice of the pharmacists.

Concluding, this paper will discuss how the integration of arts into the pharmacy education will allow for the development of empathy among the students of pharmacy, which will increase the professional skills of the students, as well as their well-being. Findings of the "Art of Pharmacy" module offered by Keele University will be discussed, and the potentials of such initiatives in developing more caring and patient-centred approach to pharmacy practice will be highlighted.

2. The ‘Art of Pharmacy’ Optional Module

The use of the humanities and arts in healthcare education is a rather new but a widely acknowledged consideration to empathy development and patient-centred care improvement. Pharmacy education specifically historically has been based on scientific and clinical knowledge instead of having an emphasis on emotional and humanistic approaches to health care. However, in accordance with the changing education trends and the increasing value of empathetic care, Keele University implemented the “Art of Pharmacy” module, which is a unique elective task with the aim to incorporate various art works into the syllabus of the pharmacy. This module was presented to the final-year Master of Pharmacy (M.Pharm.) cohort, as a platform for the students to be able to express empathy in various art forms.

The “Art of Pharmacy” module was created with an idea to cover the certain learning outcomes that correspond to the professional standards provided by the General Pharmaceutical Council (GPhC). These standards emphasize the importance of pharmacists to express empathy and keep the patient-centred approach in the practice (General Pharmaceutical Council, 2021). Specifically, the module aimed to: (i) contribute to the development of empathetic patient approach in students using different art forms, (ii) help the students to comprehend the role of art for supporting patients, especially within rehabilitation and therapeutic environments, and (iii) prompt the students to reflect on the ways how art may affect their professional development and practice as pharmacists(5).

The module was a set of 2 hours workshops that were to be conducted once a week for ten weeks. During these workshops, students interacted with several art forms such as pottery, film, music, performance, poetry, and visual arts, yet each one of which was chosen to focus on particular health conditions or patient experiences. Not only were students exposed to these forms of art but also were made to contemplate on the emotional and psychological effects of the art forms on themselves and the patients. This practical method attempted to fill the gap between the conventional pharmaceutical training and human dimension of healthcare, which was often ignored in the clinical instruction.

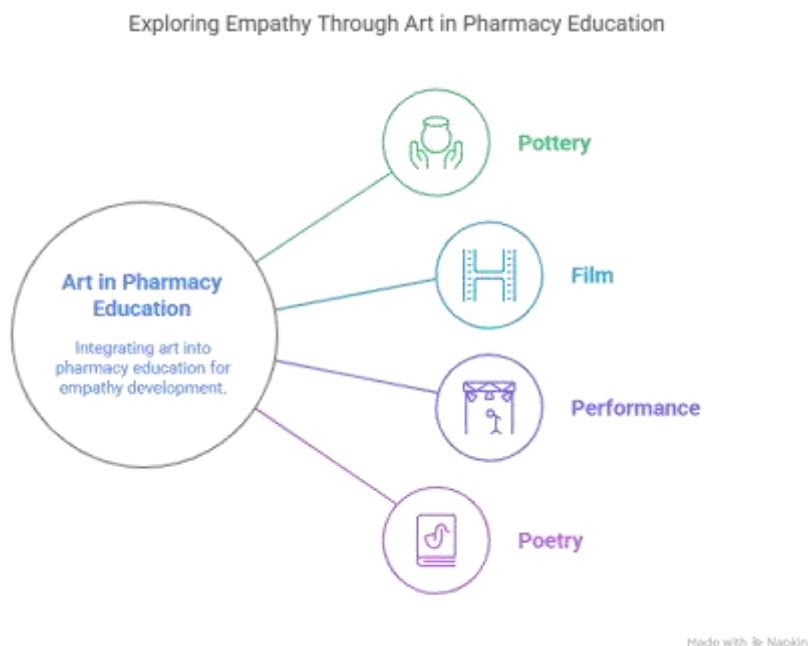


FIGURE 1 Exploring Empathy Through Art in Pharmacy Education

History of Pottery and Effect on Mental Health and Rehabilitation

The first form of art presented in the module was pottery; a technique that has been highly acknowledged in its value of being therapeutic in nature especially when concerning mental health and rehabilitation. Students took part in a pottery workshop that was given by a clay therapy expert and interacted with the medium to study ways in which the

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tactile, meditative technique of working with clay might be effectively used as tool for healing. Pottery has been proved to have meaningful mental health advantages, especially for stroke, addiction, and mental health patients' recovery. For patients, pottery can also become a source of accomplishment and mindfulness as well as a way of achieving an emotional release which is very important for mental recovery(6).

During this session, students were given a challenge of considering how the process of creating something physical could be a reflection of the therapeutic process of healing, this relating to both patients and themselves. This experience planned to develop a better understanding of the emotional cost that illness and recovery bring to the patients and the role of art therapy in helping patients through the healing process. As a result, the pottery session was favourably remarked upon by several students, who expressed appreciation of the way it expanded their ideas of the medium and made them realise that it would not always be frustrating and trying to interact with. Several students said that they found pottery surprisingly therapeutic, and they could see how it could be used to assist those with mental health difficulties or addicts.

Film as a Way to Comprehend the Patient Journeys

The second form of art which was explored in the module of "Art of Pharmacy" was a genre of film, following the specific choice of a film 50/50 directed by Jonathan Levine. This is an autobiographical movie that tells a story of a young man with cancer and how the diagnosis affects him as well as his surrounding in terms of emotions, psychology and relations. The film as a medium has a special quality to it being able to capture the delicate human experience in all its intricacies which allows making a powerful tool for creating empathy. The session not only included viewing of the film, but active involvement of students through group discussion for critical understanding of the way illness is depicted in the film, the patient experience as well as interactions between the patient and the healthcare professionals(7).

During this session, students were asked to reflect on how the experience of getting diagnosed with cancer and of treatment were presented in the film, and how all these influenced relationships with family, friends, and medical professionals. The discussion also involved how the medical professionals in the film related with the patient, and if their behaviour and way of communication is what students would expect from a sympathetic healthcare professional. The film also was useful in shedding light into some of the emotional and psychological pain that comes with living with cancer, the role that empathy could play in providing assistance to the patients in such times.

Performance and Role-Playing: Practicing Empathy in Difficult Conversations

Performance and role-playing were the third artistic activities integrated into the module, which centred on assisting students to cope with problematic and touchy conversations with the patients. The module contained a forum theatre that tested students on scenarios about bad news breaking, an important skill for healthcare providers, particularly, in oncology. Forum theatre is a type of participatory theatre which involves the audience members in the process and allows them to intervene and give suggestions on things that can be done in place of what is happening on the stage. This interactive factor gave students a chance to develop various responses to difficult situations especially those that require a lot of emotional intelligence and empathy.

In this session, students were to think about how they would approach a tough talk with a patient involving something like delivering cancer diagnosis or last life decisions. The role-play format provided an opportunity for students to learn to use emotional and cognitive features of empathy, i.e. understanding the feelings of the patient, perspectives, and needs and their adequate response. This session was especially helpful for a number of students, as it helped to develop skills of sensitive communication and hear feedback from his/her peers and instructors in a safe environment. During this process, students did not only improve their empathy but also gained confidence in handling difficult cases of patient interaction.

Poetry and the Effect of Ill on Emotions

Poetry was the fourth art presented, during the module which showed how poetry is effective in conveying strong emotional impact and an insight into the lives of patients suffering from such illnesses as chronic. Students were asked to read the poems which depicted the experiences of dementia patients, followed by a group discussion of the emotions and cognition caused by reading of the poems. In addition, they were requested to create poems of their own summarizing patient experience, which enabled them to communicate their individual feelings and ideas regarding illness and recovery via creative writing.

Many of the students reported that the poetry session left them with an incredible emotional impact, especially the aspects of their understanding of how patients with dementia experience emotional challenges. Students reflected

how the poems helped him connect more with the patient's perspective and the process of writing poetry helped students cope with their own emotions and have a more personal relationship with patients(8). For a few students, this activity was life changing through which they realized the significance of empathy in caring for patients.

3. The Impact of Arts-Based Learning on Perceptions of Illness

The challenge of students' perceptions of illness and healthcare was one of the main goals of the "Art of Pharmacy" module. In the conventional pharmacy education, a lot of emphasis is placed on the biological, chemical and the clinical components of diseases. Although that knowledge is critical, it is usually confined to only touching on human and emotional aspects in patient care. Combining different forms of art into the curriculum enabled the students to experience a one-of-a-kind opportunity to deal with the personal, emotional, and psychological aspects of illness, which is rarely covered in clinical training. Through the arts-based learning approach, the students were expected to realize their illness as not only a medical condition but also a lived condition, impacting on people in complex and multifaceted ways.

The laptops, film, poetry, and visual arts provide a strong medium for understanding the life experiences of patients. Such films such as 50/50 that discuss the emotional and the psychological journey of a cancer patient offer students a firsthand kind of approach to the experience of the patient seeing the obstacles and struggles involved in it. Such films create emotional reaction that helps students gain deeper insight into life with the chronic or terminal illness. Similarly, poetry and visual arts enable students to think about the emotional consequence of illness, looking past the clinically oriented experience and understanding the personal and relational aspects of patient care.

Specifically, the session on poetry was very useful in changing students' viewpoints about ailments such as dementia. Several students reported that they had a biased mentality of dementia patients before interacting with the poems, and so they did not view them except for how they deteriorate in their cognitive abilities. Nevertheless, following the reading and discussion of poems from which the personal experiences of dementia patients came through, students were now more empathetic and holistic in understanding the condition. One of the students shared how the poem altered their presumptions on dementia as it bridge the gap and transformed the perspective on how the dementia patients feel. This change of point of view shows how arts-based learning can sensitize students towards illness and allow them to gain a deeper and more compassionate understanding of it(9).

In addition, the pottery session offered the same chance for students' reconstruction of the concept of illness, especially as it relates to mental health and addiction. At the beginning, most students thought that pottery could be frustrating or even counterproductive for patients, affected by mental problems. However, it was the pottery workshop experience after it that brought the students a surprise in its therapeutic value, as well as its ease of use in Instructions that helped the sick manage anxieties, stress and emotional mayhem. "The tactile and meditative process of working with clay afforded a sense of accomplishment and mindfulness that may be especially beneficial for patients recovering from mental health, addiction, etc.," said one student. This session gave students an opportunity to understand how art therapy can be used in formulating a holistic treatment plan for patients whereby their physical symptoms will not be solely addressed but also their wellness in an emotional and psychological way.

Personalization of the Patient

Another core idea that came out from the "Art of Pharmacy" module was focusing on the patient and treating them as a person rather than an individual with a diagnosis or medical condition. In clinical scenarios, a situation whereby healthcare practitioners tend to be solely concerned about curing the disease or condition at hand is not uncommon. However, this practice adopted sometimes results in a dehumanized perspective to the patients, where their specific needs, experiences, and personal stories are disregarded. Through the arts especially through such activities as performance and role-playing, the student had an opportunity to move their attention away from the disease and person living with the ailment.

The performance session where students had to role-play on scenarios like delivering a cancer diagnosis – was especially appropriate in sensitizing students about the need to cater to the emotional and psychological needs of the patient. Students in the role-play were reminded to think about how they would relate with the patient outside the clinical realm of diagnosing. They had to reflect on the patient's emotions, what he/she was afraid of and what he/she was concerned about, and how they could answer in an empathetic and compassionate manner. By doing this

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exercise, students were able to learn that when diagnosing, patients are not just people who suffer from a medical condition. They are human beings who have personal stories, relationships, and feelings to consider, respect. This paradigm shift is vital in cultivating a more patient-centred approach to pharmacy practice so that the pharmacists are not just dealing with the condition but also manage the person as an integrated human being.

Likewise, the pottery session enabled the students to value the need to treat patients as individuals who have specific needs and experiences. Students were asked to envision how the working with clay could give patients a feeling of agency and control, which is usually lost during the process of treatment. As patients are involved in an artistic activity, which allows for a wide scope of self-expression, they are able to recover the sense of individual identity and emotional toughness. Students understood that this type of therapy has the potential to be especially helpful for patients with mental health issues or those struggling with addiction, in which classic medical approaches might not be sufficient to deal with the emotional and psychological aspects of the problem.

Perceived Empathy Development: Emotional, Cognitive, and Compassionate Growth

Developing empathy among the students of pharmacy was a key objective of the “Art of Pharmacy” module. Students got a chance to reflect on their emotional and cognitive responses to engaging in art activities and the ways in which they might use such experiences to inform their future practice. Students in particular were to reflect on their own development in the three areas of empathy: emotional, cognitive, and compassionate. Emotional empathy is when one is able to feel and share another person’s feelings, cognitive empathy refers to understanding another person’s view as a person matters of brain and finally there is the compassionate empathy which goes a step further to include a willingness to help and support others(10).

The module challenged the students to delve into their emotional responses to the different art forms, such as writing poetry that resonated with them so much in such a way they felt overwhelmed, or when watching a movie and feeling torn apart at the ordeals of cancer patients. A higher emotional response during the sessions was reported by many students, which they related to a better understanding of the patient experience. For instance, one student said that watching 50/50 made him/her feel strong emotions and made it easier to comprehend how cancer diagnosis can destroy a human life. This emotional connection was essential in creating empathy since this enabled students to understand patients’ emotional-psychological experience at a personal level.

Cognitive empathy was also one of the areas of development that was important for many students, especially during film and poetry sessions. These art forms made students understand about the struggles of patients not only about their medical conditions but also the struggles in their emotional, social, and psychological lives. A large number of students reported that after completing the module, they were able to take a more holistic approach to illness and realize how difficult living with chronic or terminal diseases can be. As for example, some students discussed how the poetry on dementia made them rethink their established ideas on what it feels to live with cognitive decline.

Finally, compassionate empathy, consisting of willingness to help others on the bases of emotional and cognitive understanding also was the main result of the module. Many students indicated their willingness of changing the way they would practice in future on the grounds of empathy they developed in the course. For instance, some students declared that they would focus on open communication and patient-centred approach to their interaction with patients, so that the patients’ emotional and psychological needs were addressed in addition to their clinical management. Some people stated a certain willingness to use art therapy (or other holistic techniques) in their future work and believed in the role of art for nurturing patients’ general wellbeing.

4. Reflective Pieces and Key Themes

The reflective pieces that the students had sent at the end of the “Art of Pharmacy” module were an integral part of the evaluation of the learners. These reflections enabled the students to describe their learning experiences, describe any change in their perception of illness and patient care, and reflect on their growth of empathy through arts-based activity. The analysis of these reflective pieces gave insights on how the module influenced the students in their development of empathy and perception of healthcare practice. There were four key themes derived from the reflective pieces analysis as follows: (i) learning experience, (ii) perception of illness, (iii) perceiving of patient as an individual, and (iv) perceived empathy.

1. The Learning Experience

The first theme, which occurred in the reflective pieces, was associated with students’ perceptions of the learning

experience in itself. The “Art of Pharmacy” module was viewed by many students who felt that they had been presented with new visions of patient care and ways of personal development. Hands-on, creative methods of the activities of pottery, film, performance, and poetry were outlined as an enjoyable and engaging learning process. Students stated that this module was a breath of fresh air from the more traditional lecture format elements of their learning and allowed for a more personal and creative approach to the learning material itself(11).

A number of students wrote how the activities, particularly those that involved direct contact with the art forms (e.g., pottery and music) enabled them to develop a greater understanding of the emotional and therapeutic nature of patient care. For example, one student wrote about how they had never thought about the emotional advantages of the art therapy until now, and attending the pottery session had afforded them a tangible account of how therapies of sort would help in mental health recovery. Another student pointed out that the film session created a compelling emotional ties to the patient experience, as the students found out how cancer diagnosis not only concerns the patient but his, her family and healthcare providers.

Apart from emotional benefits, students were also able to reflect on how the module helped in the general professional development. Through art in a healthcare setting, it was noted by the students that they were learning more about a patient as a whole; rather than the technical and clinical part, they were exposed to the emotional and psychological aspect of recuperation. This then aided students to learn to appreciate the role of empathy in the roles they would play as pharmacists in future.

2. Perception of Illness

The second major theme that came up from the reflective pieces focused on a change experienced by students in their sense of illness. Before joining the module, many of the students had a more clinical or objective perception about the illness the focus was mainly based on the medical diagnosis and treatment. Nevertheless, the arts-based activities prompted students to imagine the human-related aspect of illness discussing the emotional and psychological synopsis of illnesses affecting patients. For a number of students, this was a real enlightenment, which overthrew old preconceptions about some conditions.

For instance, in the session centred on dementia, students observed a drastic change in their attitude on treating patients suffering from dementia. Many students considered dementia a cognitive disability that emphasised the list of symptoms and not the person suffering from the diagnosis. However, after analysis of the emotional experiences in the poetry, students were able to understand dementia more emphatically. One student wrote: “The poem about dementia really opened my eyes to the emotional turmoil that both patients and their families experience”. I had learned that dementia isn’t all about memory loss; it’s a loss of self, and it is a profoundly emotional process.

Equally, the cancer session, which was based on watching the movie 50/50 also touched on the students’ misconceptions. Some students critically analyzed the way in which this film portrayed the emotional complexity of cancer, the psychological and relational difficulties after a cancer diagnosis. One student said, “Watching 50/50 made me realize how crippling a cancer diagnosis can be for an individual as well as for his or her family”. It left me ponder more upon emotional care that patients require and something that I hadn’t really taken into account previously.

3. Viewing Patient as an Individual.

Third key theme that has emerged is the necessity to look at the patient as an individual. During the module, there was an emphasis where students were directed to think beyond the disease and diagnosis and look at a human being. This theme became particularly visible throughout the performance and role-playing assignments, as the students participated in the scenarios related to hard patient encounters, including cancer diagnosis. These activities served to equip students on the practice of putting oneself in shoes of the patient and healthcare professional, a development which improved the understanding of the complexity of patient care.

Several students wrote about how this module assisted them to realize the need to approach care of patients in a holistic manner. One student said, “My approach towards treating patients changed after the experience in role-playing session – it isn’t about treating patients focusing solely on their state; it is about understanding the person, understanding the whole person’. Every patient has a story and his or her medical ailment is just one thread of the story. As a future pharmacist, I should not forget that every patient is more than a diagnosis they happen to have.”

Students also indicated that the module gave them an opportunity to observe the effects of illness on patients’ life

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outside the clinic. For instance, one student said that interacting with music therapy taught her that the patients, particularly the ones with mental health conditions, sometimes require more than just attending to their medical needs but also emotional support, comfort, and sense of belonging. This awareness of the diverse form of patient care aroused in students a more empathetic and individualized approach to their future practice.

4. Perceived Empathy Development

The last theme that emerged out of these reflective pieces was the perceived empathy development. A couple of students pointed out to a decrease in empathy levels when completing the module. However, the majority of them indicated that their empathy levels had increased after finishing the module. Many spoke to how the several art projects instigated emotional responses that reified understanding of patients' situations. These emotional responses were usually associated with the greater sense of understanding the hardships of the patients and the heightened compassion.

For example, the students who attended the poetry session contemplated on how reading and discussion of poems about dementia, cancer, and mental health affected them emotionally. One student said, "Poetry really helped me to identify emotionally with patients' experiences". I did not realize the amount of pain and confusion of dementia patients, and I become more empathetic to them. I will take a different attitude to such patients in future and treat them with more sympathy and understanding.

Likewise, students who interacted with the music therapy activities reported that they learned a new perspective of the role of art in the healthcare. One of the students wrote, "I never thought of music therapy as a part of the treatment plan for patients, but it definitely can help with the emotional healing. It made me understand that empathy is not all about understanding a patient's condition, but extending your help in an emotional and mental capacity during the patient's treatment process.

All in all, the reflective pieces reported that the "Art of Pharmacy" module also had a significant impact on students' empathy development. Students did not only feel a change in their affective and cognitive understanding of the patients but they also had the aspiration of applying these insights in their future profession. Many students said that they would attend patient care with a greater sense of empathy; attempting to treat patients as persons rather than as patients.

5. Discussion

The results of the assessment of the "Art of Pharmacy" module are convincing evidence that the integration of arts-based activities into the pharmacy curriculum can positively impact the development of empathy among the students. Results show that bringing students into experience with different arts, in particular pottery, film, performance, poetry, and music, enabled them to take a consistent meaning of the emotional, psychological, and human dimensions of patient care. This transition from pure clinical to more holistic, empathetic mode of which has wide rippling effects on pharmacy education and practice.

Arts in Developing Empathy in the Education of Pharmacy

One of the lessons learnt from the evaluation is how effective the arts are when it comes to fostering empathy. The incorporation of various forms of art in the module offered students different ways of unpacking the patient experience, thus, making the learning process interesting and emotionally charged. Through the use of various forms of art, students could view both the different facets of illness and recovery, giving them a more wholesome view of patient care.

For instance, students from the film session observed how 50/50 enabled them to emotionally relate to a journey of a cancer patient, opening the floor for relational and psychological complexities of surviving with terminal illness. The poetry session aimed at dementia changed the preconceptions of students about the condition and enabled them to comprehend the emotional burden of the condition on the patients and their families. In the same way, the music and performance activities provided students with hands-on training in the aspect of understanding patients' emotional needs, emphasizing the role of empathy in communication in healthcare.

The main advantage of this module is that it went beyond the theorization of empathy, which provided students with an opportunity to integrate into the patients' lived experiences in a creative and introspective way. This active, experiential learning experience allowed students not only to know about the significance of empathy but to experience this value at a personal, emotional level, which is so important for internalizing and applying the given value in clinical practice.

Defying the Previous Thoughts About Illness and the Care for the Patients

The other important aspect that comes out through the module is how arts based learning is used to push a traditional view that most students have on illness. In a traditional pharmacy education, prevailing emphasis is frequently placed on the pharmacological and diagnostic dimensions of diseases with less interest to the emotional and psychological experiences of patients. However, the arts offer an alternative powerful way of connecting with illness, and shifting focus away from disease-specific treatment to a more holistic conceptualisation of the patient's realities.

For example, the pottery session informed students regarding the possibilities of rethinking the role of art therapy to achieve the emotional well-being of the patients, especially for people who suffered from mental issues or addiction. Students obtained the first-hand understanding of possible therapeutic effects of creative expression, which is not widely explored in modern clinical practice. Such a new insight leads students to see complementary therapies, such as art therapy, as a holistic treatment for patients.

In the same way, the film session on cancer furthered the need to address the emotional struggles of the patients in the course of the illness trip. Students who attended the session reported increased knowledge on how a diagnosis of cancer can impact on the emotional, psychological, and social wellbeing of a person. This more in-depth conceptualization of illness imposes on students to consider patients as an integrated being, and not just as the carrier of disease. By practicing these different art forms, students understood how to relate to the Nature of illness from the patients' perspective; therefore, adopting more of an empathetic attitude towards patient care.

Improving Empathy through Reflective Practices

More insistence on the effectiveness of the module in fostering empathy, the reflective assignments completed by the students also support the students' ability to be empathic. Reflection plays an important role in the learning process because through it, students can contemplate their emotional response, explore their biases, and gain a detailed understanding of the materials. The reflective pieces showed the ways in which the arts-based activities evoked strong emotional responses from the students, especially in the context of such conditions as dementia or cancer. These emotional responses are vital in the process of attaining empathy because they enable the students to relate to the patient's experience in a personal way.

Furthermore, reflective process assisted the students to combine their emotional responses with their cognitive knowledge about illness. Students stated that the module not only improved their emotional empathy, but also developed their cognitive empathy, with which they were able to gain a different understanding of what patients' experience. This duality between emotional and cognitive empathy is vital for healthcare professionals because it not only helps them to see and understand a patient's emotions but they can act in a way that acknowledges the emotions while giving the kind of support a patient needs.

Notably, students were also able to reflect on the way the module had affected their professional practice. And many advocated about treating patients holistically, their symptoms and their emotional and psychological well-being. This change in mindset is important for the pharmacy students because it enables them to approach the issue of care from the patient's perspective and not limiting themselves to a prescription pad and seeing the patient as a person with individual experiences, feelings, and needs.

Main Discussion Points for the Future Practice and Education

Inclusion of the arts to the pharmacy education provides a number of important take-home messages with regards to future practice and curriculum design.

The Necessity to use Holistic Approaches in the Care of Patients

Findings from this module demonstrate the fact that patients ought to be treated as individuals having distinct tendencies emotionally, psychologically, and socially. This substantiates the call for a more holistic approach to patient care in pharmacy education, that should emphasise empathy and patient-centred care in addition to clinical knowledge and technical skills.

The Use of the Role of Arts in Professional Development

Arts-based learning exploits the unique opportunity for personal and professional growth. It enables students to work with complex feelings, become more self-conscious, and improve emotional intelligence, both of which are critical for proper communication and caring for patients. These competencies could be developed in future

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pharmacy curricula through incorporation of arts-based activities.

Empathy as Necessary Skill for Developing

The module reveals that empathy is not an inborn ability but a skill that can be acquired through reflective practices and experiences of various patients. As such, empathy training should be key in pharmacy education and room for students to interact with the patients emotionally and personally.

Assessing Empathy Development:

Although the level of self-reported empathy increased because of the module, more research is needed in order to determine if changes in self-reported empathy result in improved patient care and outcomes. Future research may be conducted regarding the ways in which such arts-based learning influences real empathetic behaviours in the clinical procedures, as well as long-term influence over students' professional practice.

Enlarging the Sphere of Arts in the Curriculum

With positive feedback and benefits that are perceived in the module, it might pay to spread arts-based learning throughout all the stages of pharmacy education. Exploring the use of art in the curriculum of the pharmacy schools and embedding art into different facets of the lesson plan, student pharmacists may embrace a more meaningful way of understanding patients' journeys and, therefore, become more compassionate and effective members of the healthcare community.

5. Conclusion and Future work

The optional module "Art of Pharmacy" has reflected the great prospects of using arts in pharmacy education for developing empathy in students and a more holistic vision of the patient care. Through involving students with different art forms such as pottery, film, performance, poetry, and music, the module presented a unique and creative space for students' investigation of the emotional, psychological, and human side of illness and recovery. The responses from the students showed that the module not only strengthened their emotional and cognitive understanding of patient's experience but also provided them with the tools to pursue patient-centred care in a more compassionate way.

The reflective pieces of the students showed marked improvements in their perspectives about illness and their knowledge on patient journey. Art experience offered students a special chance to question preconceptions, empathize, and see many aspects in the patient care. The module enabled students to recognize their patients as individuals with medical conditions but as persons with personal stories, emotions, life stories, etc. This transition towards a more personalized and empathetic patient care process is essential in developing pharmacists who will not only be experts in clinical care but also be supportive and compassionate enough for emotionally supporting patients.

Additionally, the results of the evaluation indicate that the interaction with art can have a personal value for students as it can be used for the processing of one's own feelings and the feeling of therapeutical healing in creative expression. This is especially the case in the context of the education for pharmacy, where high stress levels, and burnout, are normal for students. The module has integrated arts-based activities that empowered the students to not only elevate their professional competencies but also develop such important practices of self-care to safeguard their mental well-being in their professional lives.

Although positive results of this study are promising, further research is required to evaluate whether self-perceived empathy obtained from the module leads to positive patient care and clinical outcomes. Longitudinal studies can investigate the manner in which the students' interaction with patients is influenced by these arts-based activities once they commence their professional practice. Also, evaluating the effect of comparable arts-based modules in a larger population of pharmacy students would give an insight into the scalability and success of such educational efforts.

The success of this module highlights the need to rethink classical pharmacy education and the need for incorporating the humanities for a more holistic, patient-centred perspective of care. As the pharmacy profession keeps developing, there is an understanding that the professionals should have not only technical expertise but emotional intelligence, interpersonal skills and capacity to provide empathetic care. The "Art of Pharmacy" module is one of the examples of how the use of creative learning methods can help students to acquire these essential skills which would make a healthcare system more compassionate and patient-oriented.

Conclusively, this study depicts how the arts play an integral part in pharmacy education, which serves as an avenue

for the development of empathy, enhancement of patient care and enhancement of emotional resilience among pharmacy students. As healthcare professionals, pharmacists have the ability of having a great influence on their patients' lives not just because of their knowledge in the technical aspects but also by reaching them in a human level. Including arts-based learning in pharmacy curricula will ensure that as future pharmacists, educators produce pharmacists who excel in their practice but are also compassionate, empathetic, invested in the people that they serve.

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Conflicts of interest

The authors have no conflicts of interest to declare

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