Shakespeare as a vehicle for empathy and diagnostic skills training in undergraduate medical students in their psychiatry posting

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Psychiatry undergraduate training has been significantly curtailed by the advent of the COVID-19 pandemic. This article examines the use of Shakespeare's Hamlet, especially via the characters of Hamlet and Ophelia, to impart two core skills in psychiatry, namely diagnostic abilities and empathy. Medical students undergoing the psychiatry posting watched Kenneth Branagh's Hamlet online, focusing on identifying psychopathology, forming diagnoses, identifying countertransferences, and developing empathy through acting out close passages. Students were able to identify the features of bipolar disorder in Hamlet, correlating his behavior with separate depressive and manic episodes. They were also able to appreciate the unique quality of dissociation in Ophelia, especially in Act 4 of Hamlet, and recognize it as a manifestation of post-traumatic stress disorder. Through acting out closed passages, students were also able to feel empathy by putting themselves into the shoes of Hamlet and Ophelia. Such a pedagogical approach has additional unexpected utility in view of the COVID-19 pandemic, which has significantly curtailed face-to-face medical education, leading to alternative online methods such as movies and Shakespearean plays in psychiatry education. In conclusion, though online methods cannot fully supplant face-to-face patient contact, they can be crucial tools in times of necessity and allow students to engage in interdisciplinary education, marrying the arts and the humanities.

KEYWORDS

Shakespeare, Hamlet, Ophelia, bipolar disorder, dissociation

Introduction

The vast majority of universities and institutions teach psychiatry as a clinical science through a combination of lecture hall, bedside, shadow doctoring, and case presentation instruction at the undergraduate level. This technique provides the most realistic simulation possible of a medical job. Before this can be considered a complete success, there are numerous logistical and ethical concerns that must be resolved.

To begin with, it is not always possible to find suitable patients to illustrate particular clinical cases. It may also be unethical to exploit patients experiencing acute psychiatric illness, as they are a particularly vulnerable population (Palk et al., 2020). Furthermore, the majority of patients

suitable for undergraduate students clerking in a psychiatric unit would be semi-acute patients with few florid symptoms and signs of psychiatric illness, resulting in less exposure to acutely ill patients. This is in contrast to medicine or surgery postings, where there would be far fewer ethical minefields to navigate when caring for acutely ill patients. As a result of the recent COVID-19 pandemic, strict social distancing rules have been enacted (Hambali et al., 2022; Pang et al., 2022), and clinical bedside teaching for psychiatry has been thrown into disarray as it is currently prohibited in the majority of medical schools. Under these difficult conditions, there is merit in attempting alternative methods to replace bedside instruction in psychopathology, diagnostic criteria, and case formulation learning (Nentin et al., 2021).

In lieu of the availability of patients for bedside clinical teaching during the current COVID-19 pandemic, Universiti Malaysia Sabah has organized an innovative project to use movie portrayals of Shakespearean characters in psychiatry posting teaching sessions. This accomplished two distinct goals: first, to provide a framework for the teaching of psychopathology in psychiatry education, and second, to provide a platform for teaching medical students in a psychiatric setting empathy. We selected two Shakespearean films despite the abundance of available material for two reasons. First, they have withstood the test of time and are less influenced by a single strong or weak adaptation, as there are multiple adaptations to refer to (Hatchuel and Vienne-Guerrin, 2021), but the original text remains the primary source (Javed, 2020). Second, due to the abundance of adaptations, both strict and free, into various cultures and film traditions, their themes would be more universally recognized and adaptable than those of more contemporary works (Bate, 2013; Dobson, 2015), which may be more ethno-or culture-centric.

Literature review

Based on the review on the various concept of empathy, Cuff et al. (2016) defined empathy as a complex emotional response comprised of both innate and controlled processes. They explained that empathy is triggered by external stimuli and can result in experiencing the same emotions as others. This perception and comprehension of the emotions of others is not one's own and involves both emotional and cognitive processes. Empathy is a crucial skill in medicine: it contributes to a stronger patient-physician therapeutic alliance and better clinical outcomes (Piper et al., 2001). However, empathy is difficult to achieve, particularly in the case of psychiatric patients, because it requires "putting yourself in their shoes, "which necessitates disturbing and distressing experiences that many medical students, doctors, and even residents will never have. Shakespeare's works, however, contain descriptions of numerous disturbing psychiatric disorders. As a Shakespearean actor or student reciting lines, it would allow one to literally "put themselves in the shoes" of those who have lived with mental illness. Ophelia and Hamlet are two of the most well-known characters in a play whose plot is almost universally known, and so they are used in the empathy exercises involving acting out specific scenes. In addition, the psychopathology was more confined to specific scenes. These two characters were chosen for the following reasons: In the first place, both exemplified a psychopathology that was uncommon in the general population. Secondly, prolonged exposure to both psychopathologies is difficult due to the nature of bipolar disorder and dissociation. Thirdly, both

characters were the primary protagonists and had multiple interactions with the majority of other characters, allowing their mental illness to be observed not only through psychopathology but also through their interactions with others.

Psychopathology is the scientific study of mental disorders, such as their symptoms, causes, and treatments (Caspi et al., 2014). Several disorders or psychopathologies, including bipolar disorder, post-traumatic stress disorder, and dissociation, were examined through these characters in the Diagnostic and Statistical Manual, 5th edition, or DSM-5 for short (Brooks et al., 2020). DSM-5 is a publication of the American Psychiatric Association that provides standard diagnostic criteria and classification for mental disorders (Regier et al., 2013). It is widely used by mental health professionals worldwide to diagnose and treat mental disorders (Clark et al., 2017). The DSM-5 contains descriptions of mental disorders, their symptoms, and diagnostic criteria to aid clinicians in making accurate diagnoses. The DSM-5 defines bipolar disorder as a major mental illness characterized by either irritability or elation, as well as increased energy or goal-directed activity, occurring for at least 1 week, along with seven subsidiary criteria, such as ideation and speech pressure (American Psychiatric Association, 2013). Post-traumatic stress disorder was defined as a disorder that manifested upon exposure to a traumatic trigger and exhibited several clusters of symptomatology – hyperarousal, avoidance, flashbacks, and disturbance in mood and cognition (American Psychiatric Association, 2013). Dissociation was defined as a state of detachment from the present time and space, manifested in behaviors that were conducted as if unaware of the surroundings – what is commonly known as "hysterical" (American Psychiatric Association, 2013).

Methodology

This study involved 48 undergraduate medical students who were enrolled in three consecutive psychiatry postings. They were all 23 years old and in the same medical school class year. There was an equal distribution of men and women, and they were all of Malaysian descent and thus culturally similar. This was conducted as a two-hour focus group discussion with 16 students in each group. The only materials used were a projector, a digital video disc (DVD) copy of Hamlet, and the qualitative interview.

We instructed fourth-year medical students to watch the films and act out scenes that were particularly illustrative of psychopathology. Then, during class time, we encouraged them to reflect on their experiences living as these characters with mental illness. In addition, we centered the focus group discussions on the empathetic qualities of the characters. Then, themes were extracted, and student feedback is obtained. Through performing arts, this project aims to help medical students transcend the experience of a person with mental illness, enabling them to become more empathetic, understanding, and human doctors. In accordance with the objectives, the research questions were as follows: first, "would students gain a better understanding of psychopathology?" and second, "would students gain a better understanding of empathy?" This project was not intended to focus on interpreting the content or meaning of drama, as that would have been the subject of a humanities-oriented research project employing a very different methodology. This project merely intends to use the plays as a teaching tool for undergraduate students

who are struggling to grapple with DSM-5 diagnostic criteria that are abstract in nature, without any correlation to real clinical presentations or conditions.

Results

Shakespearean characters employed in empathy and psychopathology exercises

Hamlet

Hamlet is the character who, of the three examined in this current project, accounts for the biggest proportion of the lines of his play; hence, a lot of the play is not only devoted to his characterization, but also provides crucial biological, psychological, and social information to formulate the aetiology of his psychological disturbances. Conventional wisdom suggests he is putting on "an antic disposition" (1.5.192). However, the medical students who were involved voted in a majority, ruling that Hamlet was afflicted with a true bipolar disorder based on observation of the criteria and longitudinal observation of his illness. This stems from evidence culled from parts with no "secondary gain" in malingering illness, e.g., with Rosencrantz and Guildenstern.

The students were quick to notice, in concordance with the researcher's own observations, that there is an obvious depressive episode taking place in Act 1. He is trying "to persevere/in obstinate condolement" and "unmanly grief" (1.2.96-98). This can also be explained by the normal psychological reaction of grief, which is also encoded in the DSM-5 (DSM, 126). Nonetheless, a point against this is that his negative thoughts are directed towards himself and not toward the object of his grief. Moreover, it evolves into bipolarity by Act 2 (DSM, 126). A major depressive episode is defined by two core symptoms: low mood ("clouds hang on you") and anhedonia ["how weary, stale, flat, and unprofitable it appears all the uses of the world" (DSM, 125)]. Interestingly, it may appear on surface level to be a perceptual disturbance that was shared by three individuals, as Hamlet's two friends also appear to witness his father's hallucination. However, only Hamlet actually hears it, and Hamlet may be experiencing a true hallucination whereas the others may be experiencing affect-related illusions.

When he meets his friends in the next scene, there is no "method in his madness." Distinct irritability has already set in, fulfilling Criterion A of manic episodes in bipolar disorder (DSM, 124). After the initial warm welcome, he quickly becomes paranoid, inquiring if there is "anything but to the purpose you are sent for, "as they were not on "free visitation" on "their own inclining" (2.2.296; despite the text containing no evidence to the contrary). Mood lability characteristic of bipolarity starts emerging: he was irritable earlier but becomes slightly elated (Criterion A; DSM, 124) during the "What a piece of work is man?—how noble in reason, how infinite in faculties" (3.2.327-8) speech. Subsequently, he turns depressed again in the span of a few minutes. Also, there are hints of suicidality when he feels there is nothing to him but a "foul and pestilent congregation of vapors" (2.2.326) and he feels man is a "quintessence of dust" (3.2.332).

Quantitatively, all 48 of the medical students were not able to list down any features of bipolar disorder prior to the class, as they had not done the lecture on bipolar disorder yet to not contaminate the sample group, and we did the classes in the first week of the posting.

After the class, all 48 students were able to identify clearly the features of bipolar disorder that had emerged in Hamlet.

The medical students also noted that an important indicator of bipolarity is his emerging grandiosity. In wanting to insult the newly installed King in public via a play, he would most likely be seen as treasonous in Shakespeare's time and most certainly be executed; he clearly acts without regard to consequences (Criterion B.7 of the DSM-5). Increased energy (Criterion A) and potentially pressured speech (or at the very least speaking faster than usual; Criterion B.4) emerge when the players enter and he starts narrating his vision for the play (DSM, 124). Coupled with distractibility (Criterion B.5), when Rosencrantz suggests Hamlet "does confess he feels himself distracted" (3.1.5), there is sufficient evidence to suggest hypomania (DSM, 124).

The students are quite unanimous that a clear manic episode emerges in the final two scenes. In "The body is with the king, but the king is not with the body. The King is a thing—"of nothing" (4.3.27-29), and later, "we fat all creatures else to fat us, and we fat ourselves for maggots… your fat king" (4.3.24-26), with evidence of clanging and sound rather than semantic associations linking his speech together, which are mania psychopathology classics. The students also noticed that there is clear evidence for increased energy and goal-directed activity in "Why yet I live to say "This thing's to do," "or "Sith I have cause, and will, and strength, and means/To don't" (4.4.47-49) and grandiosity in "Whose spirit with divine ambition puffed/Makes mouths at the invisible event" (4.4.52-53), thus confirming the manic episode further."

Act 5 is characterised by mania, with disregard for consequences ("Yet have I in me something dangerous/which let thy wisdom fear"; 5.1.276-7), disinhibition ("My fears forgetting manners"; 5.2.20), a reduced need for sleep ("a kind of fighting that would not let me sleep"; 5.2.4-5), grandiosity ["40 thousand brothers could not… make up my sum" (5.1.285-6)], racing thoughts, and faster speech patterns.

For the students who were involved in acting out the manic episodes, they were astonished as to how vivid a manic episode felt when experienced through active participation rather than passive participation as a viewer. However, an obstacle was that most students in an English as a Second Language (ESL) setting were not proficient in the 16th century Shakespearean language; hence, only a very small minority of students were able to participate in the empathy arm of the project due to the requisite fluency in English at near-native proficiency.

Despite 400 years elapsing between Hamlet's publication and modern psychiatric classification systems (Craddock and Owen, 2010), medical students who watched the Hamlet dramatization found it interesting that the diagnosis appeared to be so congruent with modern-day presentations of mania in bipolar disorder. We felt that this suggests the stability of major mental illness, specifically bipolar disorder, as a psychiatric diagnosis. It weakens spurious antipsychiatry arguments that psychiatric illness is "a normal response to an abnormal society" (Szasz, 1960) and merely a stress response of higher severity that does not necessitate biological interventions.

Bipolar illness has a lifetime prevalence similar to its 12-month prevalence, suggesting its chronicity (Merikangas et al., 2007). In Shakespearean times, this would be even more so given its untreatable state before the advent of electroconvulsive therapy and mood stabilisers in the 20th century (Moreno et al., 2020). Shakespeare certainly observed many untreatable cases at the family clinic (Pearce,

2004). His depiction of a bipolarity that is as glaring to psychiatry trainees as a fresh case is an important historical record of an illness that today, as in the past, causes untold suffering and embarrassment to its patients due to their propensity for risky, disinhibited behaviour when unwell, all of which is perfectly demonstrated in the 3 h the average theatregoer spends with Hamlet.

Ophelia

The other character in Hamlet who was used for an illustration of psychopathology was Ophelia. As she does not dominate the play as much, and her characterization is mostly related to her actions after she begins her descent into madness, rather than the words she uses, the 16ᵗʰ century English employed was less of an issue, and the students were able to appreciate her unwellness more.

Ophelia suffers from great exposure to what is essentially a form of sexual violence. After Hamlet puts on an antic disposition, she saw him "ungartered and down-gyved to his ankle, "and she "feared it" for he "took me by the wrist and held me hard." When she does meet him in Act 3 Scene 1, she is again perplexed by his sudden changes in behaviour, where he implores her to "go thee to a nunnery" and alleges that "God hath given you one face and you another." To add insult to injury, her ex-lover murders her father: "First her father is slain; next your son is gone; and the most violent author of his own is just removed."

We are unable to clearly prove whether she has intrusive and distressing memories of the event or related dreams. However, she does also demonstrate intense psychological distress when confronted with cues of the trauma. When she sees the Queen, who reminds her of the trauma from Hamlet, in Act 4 Scene 5, her distress is so great that she sings "He is dead and gone" rather than being able to vocalise her despair at Hamlet's behaviour. Again, when she sees Laertes, who would be a potent reminder of her deceased father, she is only able to be "a document in madness" as she sings through a litany of flower names. Internal or external cues can cause significant physiological reactions. Laertes describes that "a young maid's wits should be as mortal as an old man's life, "which may refer to her physiological reactions to his return.

It is hard to ascertain whether there is avoidance of distressing memories, thoughts, or feelings. However, there are definitely efforts to avoid external reminders. In both scenes, once the royal couple and Laertes, respectively, encounter her, she clearly tries to use dissociation into song and disjointed speech patterns in order to avoid meaningful contact with them.

There is clear evidence of dissociation too in Act 4, Scene 5: she starts to sing when prompted to speak by the Queen, and even when she is confronted with Laertes's return. The onlookers also note she is "divided from herself and her fair judgement" She has already lost the ability to experience positive emotions by the time Act 4, Scene 5 comes around. She "cannot choose but weep" at the thoughts of her father. This is confirmed by observers who have noted she suffers from the "poison of deep grief." She also clearly reduces her participation in significant activities.

The criteria easiest to fulfil would still be the marked alterations in arousal and reactivity. There are periods of irritable behaviour and angry outbursts alternating with moments where Ophelia suddenly reverts to her usual docile self. Ophelia's "irritability or outbursts of anger" toward Claudius look crazy to the king, but follow PTSD's pattern. Initially, she confronts him with a bawdy tune about sex before marriage. However, she quickly realises she has overstepped her

boundaries and later carefully wishes the pair well. A lot of this can also be seen as reckless or self-destructive behaviour, as she is described as "importunate, indeed distracting" as her behaviour confounds the expectations of her previously being a chaste and ladylike maiden. There is also evidence of an exaggerated startle response. She is easily provoked, and we can see quick alternations from songs and allusions towards common fables to sudden calm exits when we observe her exchanges with the king and queen in Act IV, Scene V. Her concentration is also impaired; the stage directions in Act IV, Scene V already make it clear "she enters distracted."

Again, there are no clear time-frame markers in the play. However, enough time has elapsed between Polonius's death (the final event that is hypothesised to trigger her symptoms) and her reemergence in Act 4 for Laertes to be able to receive word and then "in secret" come from France. This would imply, most likely, a month by virtue of land travel requirements at that age. In terms of dysfunction, she is already regarded as a liability "for she may strew dangerous conjectures in ill-breeding minds" and has been deemed by the others to be "divided from herself and her fair judgment."

In the end, her death is most likely linked to the fact that none of her symptoms are adequately treated by the psychological therapies that would have been widely available had her traumas occurred in the latter half of the twentieth century (Tang et al., 2020). As it is, she was constantly exposed to reminders of Hamlet and Polonius, and there was no effort to sensitively mediate responses to her. In this case, students were less aware of her diagnosis, as the vast majority of them have had no clinical exposure to the construct of post-traumatic stress disorder or dissociation. Hence, they felt that through this modality of learning, they were better able to pick up the symptoms and signs of these two disorders and psychopathology. Also, they were able to better empathise with Ophelia and the sequelae of the traumas that had happened to her, as by acting out the specific segments that she was involved in, they were able to "feel" her distress better. However, just like in Hamlet, only two medical students were able to be involved in this level of empathy-generation because of proficiency issues.

Discussion

This article examines the potential use of Shakespeare's "Hamlet" in teaching diagnostic skills and empathy in psychiatry, focusing on Hamlet and Ophelia characters. Using scenes from the play to help students process their emotions in a safe environment is one exercise that can be utilized to teach these skills. This is crucial for preparing students for future encounters with real people suffering from psychiatric illness, who may elicit negative emotions or fears. Due to the restrictions imposed by the COVID-19 pandemic, many students may not have had the chance to practice empathy or countertransference with actual patients. To overcome this obstacle, the exercise involves screening scenes from "Hamlet" in class and discussing them immediately afterwards in order to capture students' cognitive and emotional responses in real time. This enables students to recognize and manage their own emotional reactions, as well as anticipate potential countertransference they may encounter when working with similar patients in the future. Using scenes from "Hamlet" to create a simulated experience, this exercise also serves as an *in vitro* desensitization to certain potentially challenging psychiatric situations. By examining the complex human experiences of the characters in "Hamlet," students can gain a deeper understanding of the

types of issues they may encounter in the future and develop the skills required to manage them effectively. Additionally, the use of literature such as "Hamlet" can supplement traditional psychiatric training and assist students in becoming more well-rounded and effective practitioners.

Cognitively, the majority of students were able to recognise the presence of these diagnoses, pinpoint the psychopathology, and identify concrete examples of DSM-5 diagnostic criteria. Emotionally, students were able to feel differing levels of empathy for different patients and to experience the emotions that resulted from seeing psychopathology-afflicted characters in distress due to their illness symptoms. These two characters have demonstrated usefulness and efficacy in educating students about empathy towards individuals with psychiatric illness, especially in an age of COVID-19 social distancing. One more crucial skill that can be taught through the use of movies is that of learning how to process the feelings that are engendered in us by our clients (Cornejo, 2013). A key skill in any form of psychiatry education is the ability to capture responses to individuals' lives, both cognitive and emotional, as this can form part of an assessment of the countertransference of the therapist or doctor towards the patient. Processing countertransference is an important skill in psychiatry (Bemak and Epp, 2001), both in terms of improving patient care and reducing biases and difficult emotions, and occasionally also in diagnostic skills, if students can accurately process the countertransference they feel towards certain patients and use it to help them reach a diagnosis. Moreover, awareness of countertransference and transference is also part of the process of generating empathy in students, helping them be more aware of their own emotions that are triggered by other people. No doubt, we are also aware that these are 23 year old fourth year undergraduate medical students, so they may have difficulties to understand and reflect fully on transference and counter-transference. However we do feel that at least they need to have awareness that these processes exist, so that they can identify it when it arises and seek help if they are not able to understand and reflect fully on their countertransferences. Through the unique medium of film, they were able to gain a bit of insight and a glimpse of the workings of transference and counter-transference.

There are certainly limitations to using such pedagogical methods. Using movies should only be an ancillary method, and in no way should it ever be allowed to supplant or replace traditional face-to-face patient contact. The danger is for under-resourced or unscrupulous medical schools with no resources or wherewithal to afford real patient contact to convert all face-to-face time to critically acclaimed programming. This is a false extension of this argument, using them for teaching purposes. Movie series merely make the face-to-face teaching experience richer, as they top up certain teaching points that are difficult or improbable in face-to-face patient contact, e.g., immediate processing of countertransference, noting offensive or troublesome symptoms immediately, and examination of a fictional patient's collateral personal and social history. It can also help supplant teaching for diagnoses where sourcing real patients might be difficult or unethical, e.g., post-traumatic stress disorder, where getting patients to relive their experience via repeating history to multiple students might essentially constitute re-experiencing and cause further flashbacks and hyperarousal.

Unlike pathology or radiology, where the aspect of live human interaction has no direct impact on the student's diagnostic or interpretation skills, psychiatry is a branch of medicine with no confirmatory biological tests or physical examinations. Hence, "the doctor is the stethoscope," and as such, needs live practise with real

patients in order to tease out psychopathology and distinguish between shades of grey of emotion, cognition, and behaviour in order to come to a diagnosis. Movies can merely be used to sharpen, not forge, that knife.

An important proviso must be made, however, in the current global educational scenario. COVID-19 has prevented all measures of bedside clinical teaching from happening (Mukhsam et al., 2020); however, many medical schools are still forced to continue lectures and psychiatry postings for students with much reduced clinical teaching capacities (Ibrahim, 2020). Using Hamlet characters as teaching examples during the COVID-19 pandemic provides clinical students with a helpful alternative to observing actual patients when physical interactions are limited. It is important to note, however, that while this approach may help students develop skills such as critical thinking and communication, it may not completely replace the experience of interacting with actual patients. This would be especially relevant for Shakespearean characters, as it allows comparison between different filmographers' interpretations, which would allow students to critically observe the countertransference for differences. The other alternative to this is to get real or simulated patients on Zoom or Google Meet for students to clerk as bedside teaching. However, due to privacy and confidentiality issues and the urgency of the pandemic, this was not often possible (Sze et al., 2020). Once strict quarantine and social distancing measures have been relaxed, it will hopefully transition back to being a supplementary rather than primary mode of clinical education.

Conclusion

In conclusion, this article describes the experience of using Shakespearean characters as virtual teaching aids in helping undergraduate students learn psychiatry, by boosting empathy, teaching about transference and countertransference, and increasing engagement with psychopathologies that are ordinarily quite difficult to experience, be it in normal times or in the "new normal" of the COVID-19 pandemic. From the qualitative feedback obtained from students, such methods do boost interest levels in learning dry sets of psychiatry symptoms and allow a more holistic psychosocial exploration of the diagnoses that are covered in a traditional educational program. Shakespeare once again demonstrates that he was a chronicler of his time and of all ages. His foresight and uncanny accuracy of characterization allow presentations of mental illness and psychological symptoms from 500 years ago to be relevant to something as novel and unusual as undergraduate psychiatry medical education.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

Ethical approval was not provided for this study on human participants because the article did not identify specific individuals, and participation was completely voluntary. The patients/participants provided their written informed consent to participate in this study.

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

The reviewer JL declared a past co-authorship with the author NP to the handling editor.

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