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The biological paradigm of psychosis in crisis: A Kuhnian analysis

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Abstract

The philosophy of Thomas Kuhn proposes that scientific progress involves periods of crisis and revolution in which previous paradigms are discarded and replaced. Revolutions in how mental health problems are conceptualised have had a substantial impact on the work of mental health nurses. However, despite numerous revolutions within the field of mental health, the biological paradigm has remained largely dominant within western healthcare, especially in orientating the understanding and treatment of psychosis. This paper utilises concepts drawn from the philosophy of Thomas Kuhn to explore the impact of what Kuhn terms 'anomalies' within the dominant biological paradigm: the anomaly of the meaningful utterance, the anomaly of complex aetiology and taxonomy and the anomaly of pharmacological inefficacy in recovery. The paper argues that the biological paradigm for understanding psychosis is in crisis and explores the implications for mental health nursing.

KEYWORDS
Kuhn, mental health nurses, psychosis

1 | BACKGROUND

Evidence-based practice is built on a metanarrative that scientific developments in healthcare occur in a cumulative manner, with incremental movement towards the resolution of a problem or question (A. J. Grant, 2016). However, Kuhn (1962) proposes an alternative conceptualisation arguing that scientific development is defined by epochs of ongoing creation, crisis and revolution. These revolutions are so profound that, within healthcare, they can fundamentally change the epistemological foundations of research and healthcare practice (Fairman, 2022) by delineating what can be considered legitimate knowledge (Stevenson & Beech, 2001).

The field of mental health nursing is certainly not exempt from such paradigmatic struggles and revolutions. Historically these revolutions have often occurred in wider psychiatry, directly influencing mental health nurses whose role remains complexly, perhaps uncomfortably, intertwined with psychiatry (McSherry, 2018). An example of one revolution can be observed in the historical classification and subsequent declassification, in the 1990s, of homosexuality as mental illness (Carr & Spandler, 2019). This classification was based on a psychiatric paradigm which pathologised homosexuality as a mental illness, sometimes characterised as nymphomania or erotomania (Romano, 2019). Working within this paradigm, doctors were trained to diagnose (Glass, 2018) and mental health nurses often administered aversion therapy, frequently feeling

unable to object due to fear of dismissal should they fail to fulfil their role within the psychiatric hierarchy (Dickinson, 2015). The revolution of declassification shifted the epistemological foundations of what could be considered mental illness, thus liberating mental health nurses from administering what many at the time considered to be a barbaric practice (Dickinson, 2015). Unfortunately, this is a revolution which remains ongoing in some parts of the world (Immigration and Refugee Board of Canada, 2007).

The emergence of these revolutions has often involved struggles, frequently perpetuated by activism by those outside of health services, sustained by competing discourses with ethical, moral and logistical arguments in relation to areas of contestation within mental health nursing (Bull et al., 2018; Hopton, 1997; Hui & Stickley, 2007; Luidstrom, 1995; McCrae, 2019; Pearson et al., 2018, 2021), seeking to catalyse paradigmatic progression (Dietrich, 1976; Jones et al., 2007; McCann & Brown, 2019). The success of revolutions is often defined by the influence within pedagogical spaces, observable in the way in which those newly entering a profession might struggle to comprehend a time when practice was not orientated by the current dominant paradigm (Felton & Stacey, 2018; Hyslop-Margison, 2009; Kuhn, 1962). For example, in relation to the closure of large psychiatric asylums in the UK in the 1990s, those now entering pre-registration mental health nursing training might scarcely conceive of the notion of care occurring within this context. In contemporary discourse, the notion of the asylum is often presented as an artefact of past psychiatric failures, despite contemporary acute mental health wards being are arguably less therapeutic than their predecessors (Doncliff, 2017).

Defining the concept of the paradigm is notoriously difficult (Pirozelli, 2021). Therefore, in attempting to define what is meant by the biological paradigm of psychosis, the paper draws on the work of Masterman (1970, p. 66) who described Kuhnian 'sociological paradigms' as 'a set of scientific habits' which are based on past scientific achievement and serve to orientate all those working within the paradigm as to what the salient problems are and how these problems can be further researched and understood. This ongoing scientific problem solving is termed by Kuhn (1962) as 'normal science'.

In applying this definition to the concept of *the biological paradigm of psychosis*, the initial scientific achievement can be considered in the work of Emil Kraepelin (1898) who developed and proposed the initial nosological criteria for psychosis and proposing an aetiology resulting from abnormal biological processes. As reported by Scull (2011, p. 5) 'by the end of the late 19th century, with equal certainty, the professional consensus was that the mad and mentally infirm were a biologically defective lot'. The normal science that followed, is observable both within research, which focused on understanding the biological origins of this condition, and also within psychiatric practice, such as the development of pharmacological treatments (American Psychiatric Association, 2013; P. Morrison et al., 2019).

When considering the impact of the biological paradigm of psychosis on the 'normal science' of clinical mental health practice, similarities can be drawn between the notion of the paradigm, and the concept of the 'episteme' proposed by Foucault (1966). An episteme can be understood as 'the prevailing conceptual framework that orders the understandings of an object or topic of interest' (Clinton & Springer, 2016, p. 122). Therefore, those working within mental health services, including mental health nurses, are orientated towards working within a conceptual framework which establishes psychosis as a phenomenon which can be understood primarily as a biological illness. This serves to establish the boundaries of clinical practice and emphasises the prioritisation of 'symptoms and medication' (Cleary et al., 2013).

The term 'Anomalies', as suggested by Kuhn (1962), can be considered as results or experiences which fail to be explained by the dominant paradigm. This is not to necessarily suggest that anomalies are particularly rare. In fact, many minor anomalies, when they do occur, might be viewed as unremarkable in the broader context of the paradigm's supporting evidence, especially as people will often seek to hold onto existing beliefs rather than revise their theoretical understanding (Guilhot, 2015). Anomalies represent the genesis of discovery, a complex process which involves 'recognising both *that* something is and *what* it is' (Kuhn, 1962, p. 55 emphasis in original). However, it may become impossible for some discoveries to be accommodated by the existing paradigms, potentially because of the extraordinary nature of the finding or as the result of a series of discoveries coalescing into an overall result, too anomalous for the current paradigm to reconcile. It is this development of an overwhelming series of anomalies which prelude a paradigmatic crisis.

Utilising the lens of Kuhnian philosophy, this paper begins with a critical appraisal of the way in which the dominant biological paradigm for explaining psychosis has emerged in psychiatry and how this has shaped the way in which professionals, including mental health nurses, respond to psychosis. Three anomalies which have challenged the dominance of this biological paradigm can be summarised under the following headings, (i) the anomaly of the meaningful utterance, (ii) the anomaly of complex aetiology and taxonomy, and (iii) the anomaly of pharmacological inefficacy in recovery. These major anomalies have combined to create a contemporary paradigmatic crisis which is observable in the creation and proliferation of competing paradigms. Finally, the paper reflects on the implications for practice, with a focus on how mental health nurses can respond to this time of crisis and revolution.

2 | THE ORIGIN OF THE BIOLOGICAL PARADIGM OF PSYCHOSIS

In relation to the biological paradigm of psychosis, the foundation for what would become the field of psychiatry was established during the 18th century (Ellenberger, 1994) as enlightenment style thinking prescribed the importance of exploring and categorising physiological pathologies, such as those thought to be responsible for the genesis of psychosis or madness (Read & Dillon, 2013). However, before the 19th century there is little recorded documentation relating to the

biological paradigmatic perspective of psychosis (Hare, 1988), with such experiences often conceptualised as spiritual or demonic possession (Porter, 2003). The 19th century saw the rise of the asylum and the recognition of psychiatry as a medical speciality, and in turn the recognition of psychiatrists as medical specialists and not the previously marginalised professionals, termed alienists, working within the asylums (Porter, 2003). Mental health nurses, then referred to as 'attendants' within the asylums, held minimal status, occupying a social and intellectual space between psychiatrists and patients, and primarily operating to implement treatments and enforce asylum regimes (Nolan, 1993).

The rise in the medical and academic credibility of psychiatry required evidence of scientific legitimacy, and the desire for such credibility is an observable catalyst in the genesis of the biological paradigm of psychosis (Read & Dillon, 2013). The term psychosis, began to be used interchangeably from the middle of the 19th century to refer to madness (Gale et al., 2013) and remained in use despite the developments in psychiatry. In the latter half of the 19th century Emil Kraepelin formalised and introduced the concept of dementia praecox as a degenerative condition, resulting in an impairment of the psyche (Kraepelin, 1913), evolving the term from the previously accepted diagnosis of 'demence'. A term, within medical parlance, used to classify individuals experiencing chronic mental illness (Gottesman, 1991).

The term 'psychosis' eventually replaced the term insanity as a generic term use to describe the mental illnesses which fitted within the diagnostic framework of dementia praecox (Berrios et al., 2003). Kraepelin (1898) emphasised an aetiology initially occurring during adolescent or early adulthood, resulting directly from biological or neurological changes to the brain. The prognosis specified a progressive, continual decline of the individual's mental health; even those who might recover short term would ultimately deteriorate as the illness developed. Kraepelin designated the two broad categories of symptoms observed in people diagnosed with psychosis as the presence of bizarre, disordered thoughts and a degradation of volition and motivation (Snowden, 2008).

While the discourse associated with psychosis has continued to develop, this initial classification was as influential to psychiatry as Newton was to physics (Bentall, 2004). This classification was born out of a time when the priority of psychiatry was not so much to understand the experience of psychosis, but rather to classify the disorders or diseases being displayed (Porter, 2003). This priority which can be understood as a reaction to a scientific imperative to classify, and the sociological tendency for groups to look to those in power to provide answers and reassurance (Rogers & Pilgrim, 2014).

3 | THE ANOMALIES TO THE BIOLOGICAL PARADIGM

3.1 | The anomaly of the meaningful utterance

In his initial conceptualisation of psychosis, Kraepelin (1898) was forthright in his assertion that those experiencing psychosis are unable to provide useful or meaningful insight into their experience, as their language, similarly to their sense of self, has become disconnected from the world around them. Therefore, the notion of attempting to understand the phenomenological position of an individual described as experiencing psychosis was perceived as a futile endeavour, as those experiencing psychosis were deemed to be incoherent and incapable of conveying tangible information (Bentall, 2004). In this context, the utterances of people considered to be psychotic are not viewed in the context of meaning, but rather in the context of diagnostic indicators. Language is considered to be an outward representation of an inner pathological dysfunction, and is therefore a resource in the diagnostic process in the absence of scans or laboratory tests to identify the presence or absence of psychosis (Scull, 2011).

However, sustained anomalies within the biological paradigm have demonstrated the potential meaningfulness of what might be termed psychotic utterances. For example, delusions have traditionally been described as false beliefs which are unamenable to reason and unexplainable in relation to an individual's social context (Jenner et al., 1993). However, examples of delusional beliefs being understandable have been observable since the early 20th century. In his thesis, Lacan (1932), a psychiatrist and psychoanalyst, documented his work with Aimee, a young woman who had attacked an actress due to suffering from what was described as a psychotic illness. Lacan documented the manner in which Aimee's utterances and presentation became understandable when viewed within the context of her past trauma and other biographical information. In documenting the eruption of the unconscious into the real world through discourse and language, Lacan argued that the language of the individual is the key resource in attempting to reach a deeper level of understanding in relation to psychosis (Benvenuto & Kennedy, 1986).

In the 1960s, the psychiatrist Laing (1960) railed against what he considered to be a myopic biomedical view of psychosis within psychiatry, and the inability of biological perspectives to adequately bear witness to the experience of those he was working within clinical practice. Laing (1960, p. 48) wrote of his conversation with an individual named James, who was under the care of psychiatry and who described himself as '…only a cork floating on the ocean'. Laing spoke of how this statement was ignored as irrational and irrelevant, and yet James seemed to be conveying something highly salient about is sense of identity and his struggles against existential insecurities.

In the 1980s one of the most notable anomalies occurred when psychiatrist Marius Romme and his patient named Patsy Hague appeared on television to discuss her experiences of psychosis, specifically voice hearing (James, 2001). In reaction to this interview, hundreds of individuals responded to share their experiences of voice hearing, many of which spoke of the meaningful nature of their experiences and collectively expressed their desire not to receive a medical intervention to address these experiences.

In these examples, meaning appears to have emerged from language which was traditionally felt to be meaningless within the biological model of psychosis. This is not to suggest that psychosis

may not be a traumatic experience which can often profoundly impact an individual's sense of self and experienced reality, as is frequently the case (Berry et al., 2013; Rodrigues & Anderson, 2017). However, anomalies such as these have consistently challenged the traditional biological paradigmatic perspective that the utterances of those who are experiencing psychosis cannot hold deep and significant meaning (Pearson et al., 2020; Read et al., 2014; Seikkula, 2021).

3.2 | The anomaly of complex aetiology and taxonomy

Aetiologically, from a biological perspective, psychosis is conceptualised as something which originates within individuals, a form of brain disease or biological irregularity. This taxonomy fails to reflect either the diversity of experiences described as psychosis (Guloksuz & van Os, 2021), or the multiple complex factors associated with the aetiology of psychosis (Moncrieff & Middleton, 2015). However, since its Kraepelinian inception, this perspective has orientated psychiatry towards an understanding of psychosis as a discrete disorder originating from a biological or neurochemical abnormality (Broome, 2013; Ebert & Bar, 2010; Read & Dillon, 2013).

As biological science has progressed, the techniques available to study the brains of people who have experienced psychosis have improved significantly, moving from the post-mortem examinations of Kraepelin (1913) and Alzheimer (Hippius & Müller, 2008) to the MRI scans and voxel-based morphometry of contemporary medicine (Bentall, 2004; Palaniyappan et al., 2015). In recent years, investigations have focused on exploring the potential influence of factors such as inflammation (Martinez-Cengotitabengoa, MacDowell, Alberich et al., 2016) and epigenetics (Pidsley & Mill, 2011). However, despite these developments, there remains an absence of an identifiable pathology underpinning psychosis, which can be understood in isolation from an individual's social and psychological experiences. Even the central pathophysiological role of dopamine dysfunction has recently been called into question, following a meta-analysis revealing no evidence of variability in neurochemical measures between those identified as high risk of psychosis and control groups (McCutcheon et al., 2021). In contrast, emerging evidence continues to highlight the previously ignored impact of childhood traumas on the development of psychosis in adults (Bebbington, 2009; Read & Bentall, 2018).

The rate of schizophrenia has traditionally been reported as just under 1% of the population (Stilo & Murray, 2010). However, this 1% statistic is itself anomalous owing to its reported uniform prevalence across populations, locations and cultures, making schizophrenia unique amongst diseases (R. D. K. Murray, 2008). Moreover, this general statistic fails to capture the heterogeneity and idiosyncratic nature of experiences of psychosis (Cicero et al., 2019). Meta-analyses have shown that psychotic experiences such as hearing voices and experiencing paranoia may be experienced by approximately 8% of the general population (Linscott & van Os, 2012; Van Os et al., 2009), with certain psychotic features such as paranoia experienced at a significantly greater prevalence (Bebbington et al., 2013). Furthermore, there is increasing evidence to suggest that many of those who are experiencing psychotic symptoms may not have a clinical psychotic diagnosis (Kelleher et al., 2018; G. K. Murray & Jones, 2012; Peters et al., 2016), and are not in contact with mental health services (McGranahan et al., 2021).

3.3 | The anomaly of pharmacological inefficacy in recovery

The early pharmacological treatments for psychosis arose following the serendipitous observation of a surgeon using the newly synthesised drug Chlorpromazine, as an anaesthetic agent (Laborit et al., 1952). The observation that the tranquillity evoked by this drug might have applications within psychiatry was adopted quickly into the biological paradigm with administration to patients beginning in 1952, despite the mode of action remaining unknown until 1963, when the blockade of dopamine receptors was first identified as the predominant mode of action for these medicines. In contemporary mental health services the 'normal science' undertaken within the biological paradigm remains orientated by this dopamine hypothesis, viewing pharmacological interventions as a crucial resource in treating psychosis, as is observable in the increasing rates at which these medicines are being prescribed (Royal College of Psychiatrists, 2018).

However, as suggested by A. P. Morrison et al. (2018, p. 83) 'the efficacy and effectiveness of antipsychotics to produce clinically meaningful benefits for people with psychotic disorders have been overestimated'. A World Health Organisation (WHO) study undertaken in the 1990s compared outcomes for people diagnosed with schizophrenia in 'developed' and 'undeveloped' countries. The results showed higher recovery rates from schizophrenia in 'undeveloped' countries and while the WHO did not identify a specific cause for this anomalous finding, it is notable that 'undeveloped' countries generally had less access to pharmacological resources and tended to not maintain people on antipsychotic medications for extended periods of time (Jablensky et al., 1992; Whitaker, 2004). Since this seminal WHO study, new antipsychotic medications have been developed and introduced to clinical practice. However, these have been shown to be no more effective than traditional antipsychotics (Leucht et al., 2009; Lewis & Lieberman, 2008; Lieberman et al., 2005).

This is not to say that antipsychotic medications cannot have a meaningful impact. In the short term, people can benefit from antipsychotics, and these medications may also offer some protection against relapse (Ceraso et al., 2020; Leucht et al., 2012; Leucht et al., 2018). Moreover, a recent Cochrane systematic review found that maintenance antipsychotics prevent relapse to a much greater extent than placebo up until 2-year follow-up (Ceraso et al., 2020). However, there is also evidence to suggest that early dose reduction of antipsychotic medications may lead to improved long-term outcomes (Wunderink et al., 2013) and that those who remain on

antipsychotics, despite experiencing remission during the first 2 years, may endure longer term social disability, often resulting from severe and debilitating side effects of medication (Moncrieff et al., 2019; Wiersma et al., 2000).

Antipsychotics have also been shown to be ineffective for the significant number of individuals classed as 'treatment resistant', for whom multiple antipsychotic medications have failed to provide meaningful benefit (Dempster et al., 2021) and psychosocial interventions appear to be more effective augmentative treatments (Ranasinghe & Sin, 2014). For this group of people, higher doses of antipsychotic medications may offer little benefit as despite a total blockade of dopamine D2 receptors, no relief or lessening of psychotic symptoms is experienced (Samara et al., 2016). While Clozapine is established as an efficacious treatment for refractory schizophrenia, a Cochrane review highlighted that in relation to Clozapine efficacy, data capturing quality of life and cognitive function remains limited (Asenjo Lobos et al., 2010). Moreover, a subsequent meta-analysis reported that there remains insufficient data available to conclude which antipsychotic medications are more efficacious for treatment-resistant psychosis (Samara et al., 2016).

These anomalies, in which people have either not responded to, or have recovered significantly without antipsychotic medication are irreconcilable with a biological paradigm underpinned by an epistemology orientated towards psychosis as a biological condition. The 'normal science' of administering pharmacological interventions to treat psychosis remains omnipresent within mental health care (Whitaker, 2011), however, the dopamine hypothesis, remains unable to adequately explain these ongoing anomalies, despite decades of research (Bentall, 2004).

4 | THE CONTEMPORARY PARADIGMATIC CRISIS

The repeated challenges to, and anomalies within, the traditionally dominant biological paradigm have induced what could be viewed as a Kuhnian state of crisis. That is not to say that the dominance of the medical model has receded. Recent years have seen the development and publication of the most recent diagnostic manual (Ecks, 2015; World Health Organisation, 2019), and it remains likely that those accessing mental health services due to experiencing what might be considered psychosis, are initially offered treatment guided by the biological paradigm (P. Morrison et al., 2019; Taylor, 2015).

Moreover, for those working within contemporary mental health services, the notion of working within a crisis might well appear bizarre as they remain unaware of the existence of the competing discourses. Kuhn (1962) suggests that for many, revolutions are invisible as understanding is shaped by the dominant narratives, emerging from those in authority and disseminated through education. However, the state of crisis can become visible when witnessed in the context of 'increasing vagueness and decreasing utility' of existing paradigms, evidenced by the proliferation of new and novel theories into an established, once unassailable discourse (Kuhn, 1962, p. 71).

An example of this proliferation is observable in the current clinical guidelines for the treatment of psychosis, published by the National institute for health and care excellence (NICE, 2014). These guidelines currently recommend anti-psychotic pharmacological treatment, cognitive behavioural therapy, and family therapy. All these treatments, while potentially effective (Jauhar et al., 2014; Kahn et al., 2008; Seikkula et al., 2006) offer different ontological and epistemological understandings of psychosis and represent alternative paradigms which challenge the orthodoxy of the biological paradigm (Walker, 2010).

As competing theories regarding the origins and potential treatments of psychosis have become myriad (Bentall, 2004; Cooke, 2017), examples can be seen in clinical mental health practice of what Kuhn (1962, p. 69) describes as the 'breakdown of normal technical puzzle solving activity'. The instruments that historically had been used to support the 'normal science' of working within the biological paradigm, such as the diagnostic and statistical manual (American Psychiatric Association, 2013) to classify mental illness, are perceived as having less value within contemporary healthcare (Raskin et al., 2022). Moreover, the tools that had previously been considered the foundation of practice, such as antipsychotic medications are treated with much greater ambivalence, and for some are no longer the primary focus of therapeutic work (Bressington & White, 2015; Morant et al., 2018; R. M. Murray et al., 2016; Odeyemi et al., 2018).

In acknowledging this potential crisis one also acknowledges an 'essential tension', between the safety of remaining working within the confines of existing paradigms and the risk of developing new theories and ways of understanding (Kuhn, 1977). This tension is likely to only increase as increasing numbers of those working within mental health services endorse a variety of theories and models in relation to psychosis (Harland et al., 2009). While risk taking might be uncomfortable, scientific revolutions can only be resolved through exploration, debate and experiments within and between paradigms (Kuhn, 1962).

4.1 | The revolution and the implication for mental health nursing practice

Kuhn (1962) emphasises that the transition between paradigms is not straightforward and is marked by ongoing dialectics and struggles between competing ideologies and theoretical understandings. However, a paradigm is more than just a theory, it is a way of viewing the world (Elad-Strenger, 2013), and Kuhn (1962) argues that all those working within a paradigm are committed to working towards the justification of the scientific principles established by the paradigm. Moreover, psychologically this position of working within a paradigm can represent a safe place in which one feels self-sufficient (Kožnjak, 2017). Therefore, it is understandable that such a change

could be experienced as challenging to one's identity and sense of self.

For mental health nurses, revolutions can be experienced as very disorientating times, as nurses try to understand their role and place within the emerging paradigm (Hein & Scharer, 2015; Holmes, 2006). However, despite the potential perceived threat, these periods of crisis and revolution can also produce opportunities (Sturm & Mülberger, 2012). Popper (1970, p. 53) proposes that those undertaking normal science could be considered 'victims of indoctrination', working within paradigms which are not accepting of novel theories. Mental health nurses are perhaps an interesting group to be considered in relation to this notion of indoctrination, as one could argue that mental health nurses are often working *within*, but not necessarily *of* biological or medical model paradigms (Isobel & Edwards, 2017; Wilson et al., 2021). In this sense, mental health nurses could be viewed as an oppressed group (Roberts et al., 2009), often working within a paradigm underpinned by an epistemology which is of limited use to them (O'Donovan, 2007). Yet, mental health nurses also represent potential 'conduits for ideological powers' (A. Grant & Gadsby, 2018; p. 2), and consequently could have a significant role in either proliferating existing paradigms or driving revolutions as activists and revolutionaries (Morin & Baptiste, 2020).

Competing paradigms are often characterised by an inability to create a shared language which is mutually understandable and comprehendible (Kuhn, 1983). This difficulty in creating a shared discourse around psychosis is perhaps reflective of the shift from a realist, positivist understanding of psychosis to one which adopts a more relativist position, in keeping with the novel ideologies which have developed over the late 20th and 21st century, placing increasing importance on the narrative of the individual. Whether this be the Hearing Voices movement (Romme & Escher, 1989), the recovery movement (Anthony, 1993; Slade et al., 2014) or the field of Health Humanities (Crawford et al., 2015; Pearson et al., 2020). All these exemplars have moved towards a phenomenological understanding of psychosis, reclaiming the narratives, conceptualising psychotic experiences as psychologically defensive responses (Beavan, 2011), and emphasising the importance of meaning making; finding a new language with which to explore and understand these experiences (Corstens & Longden, 2013).

In this search for a new language, there is an observable commonality between each of the anomalies identified within this paper; that of valuing the voice of individuals. A voice which has historically often been silenced or discredited. Engaging with these voices echoes what Watson (2020, p. 699) refers to as 'sacred activism', in which nurses transcend conventional knowledge or approaches, in search of more humane analysis and action. In mental health nursing, such transcendence can be observed in the legacy of nurses such as Hildegard Peplau, Eileen Skellern and Annie Altschul (Winship et al., 2009). The activism by mental health nurses, both subject *to* and potential revolutionary *within* contemporary practice, is complex and more work is required to fully understand this experience. However, this process of activism resonates significantly with what Mannheim (1951) describes as 'integrative behaviour'. Integrative behaviour is not simply about passive compromise, accepting the multitude of competing paradigms; rather it forces individuals to utilise creative energy, expose themselves to differing paradigms to discover new ways of being. This requires mental health nurses to listen, not only to the dominant paradigm but to emerge oneself within the chaos of the crisis, embrace the uncertainty and develop a critical awareness of the paradigms which might be driving practice, crisis, and future revolutions.

5 | CONCLUSION

The philosophy of Thomas Kuhn emphasises the role of paradigms which can be understood as the fundamental ideas, methods, language, and theories that are accepted by a community of scientific practitioners (Anand et al., 2020; Kuhn, 1962). A biological paradigm has traditionally orientated the understanding and treatment of psychosis; evidenced in diagnostic manuals and pharmacologically orientated treatment guidelines (P. Morrison et al., 2019; NICE, 2014). This paper argues that a series of anomalies occurring within the traditionally dominant biological paradigm have resulted in an ongoing state of paradigmatic crisis. This state of crisis is observable in the proliferation of novel theories and the decreasing utility of the practices of 'normal science' (Kuhn, 1962).

Mental health nurses are likely to experience myriad crises and revolutions because of the complex and ever-changing nature of clinical practice (Younas & Parsons, 2019). However, periods of revolution can be challenging for all involved, especially as practitioners can experience a feeling of entrapment within paradigms (Galasiński & Opaliński, 2012), unable to break free from the dominant discursive contexts of their work (de Waal et al., 2022). During these moments of revolution, philosophy can exist at the intersection of thinking and doing (Jankunis et al., 2021) and can be practically engaged in real-world challenges (Habermas, 1992). Therefore, Kuhnian philosophy can provide a unique framework for understanding the state of contemporary evidence based practice, especially at times when previous accepted dominant ideas begin to fade in response to the increasing acceptance of new interpretations (Pires, 2013). This increased understanding may enable mental health nurses to respond creatively during these times of crisis, not only tolerating the uncertainty of crises but actively working within the chaos to discover new ways of working and being.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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