

**An ethics analysis of antipsychotic dose reduction and discontinuation: principles for supporting recovery from psychosis**

The authors include people with lived experience of psychosis and antipsychotic use and tapering.

### **Abstract**

**Objective:** To examine the evidence and practice of antipsychotic dose reduction from the lens of biomedical ethics (specifically principlism) to support evidence-based practice and patient choice and self-determination.

**Method:** An overview of the evidence from randomised controlled trials of antipsychotic dose reduction versus maintenance is presented. This is followed by a theoretical examination of the four key biomedical ethical principles of autonomy, non-maleficence, beneficence, and justice and how they apply in the case of antipsychotic dose reduction.

**Findings:** Existing clinical trial research is dominated by relapse as the primary outcome, with dose reduction associated with a higher risk of relapse than maintenance. Few studies have measured other patient-centred outcomes, but have shown preliminary evidence for superior cognitive functioning, lower negative symptoms, and better functioning following dose reduction. Respect for autonomy is a cornerstone of psychiatric rehabilitation and this includes the right of people to choose to reduce or discontinue antipsychotic medication. Reduced capacity for treatment decision-making can be supported. Autonomy and appraisal of non-maleficence and beneficence associated with dose reduction can be facilitated through shared or supported decision-making. Clinicians should continue to strive for justice through the fair allocation of resources to support all people who request antipsychotic dose reduction.

**Conclusions and Implications for Practice:** Clinicians have a responsibility to balance the four core ethical principles to the best of their ability when supporting a person in their recovery journey. Exploring, trialling, and supporting antipsychotic dose reduction may be part of this process if that is the patient's choice.

**Key Words:** autonomy, non-maleficence, beneficence, justice, tapering.

**Impact and Implications**

Autonomy and justice are upheld when people are supported to reduce or cease antipsychotic medication if that is their choice. Clinicians can balance the principles of non-maleficence and beneficence (i.e., minimise harm and promote a person's welfare) by staying up-to-date with and sharing the evidence openly with patients, promoting supported or shared decision-making, advanced statements, slow hyperbolic tapering, and providing additional monitoring and psychosocial support.

## Introduction

Antipsychotic medications are effective for many people in reducing psychotic symptoms such as hallucinations and delusions and are therefore recommended worldwide as the first-line treatment for acute psychosis to achieve symptomatic remission (Hui, Lam, et al., 2019; Leucht et al., 2021). After remission, maintenance of antipsychotic treatment for at least 1-2 years is recommended to prevent relapse (Hui, Lam, et al., 2019). Preventing relapse is important because relapse is associated with distress and economic costs (Leucht et al., 2012). However, it is estimated that antipsychotics are not effective for up to 23% of patients (Demjaha et al., 2017; Mørup et al., 2020) and antipsychotics also cause harms such as unpleasant motor and metabolic side-effects, sedation, cognitive impairment, emotional blunting, and amotivation (Barbui et al., 2005). Accordingly, growing debate and investigations have focused on determining the risks and benefits of antipsychotic maintenance compared with dose reduction or discontinuation (Ostuzzi et al., 2022; Sommer et al., 2022).

The field is evolving because symptomatic remission and avoiding relapse are considered by patients and clinicians as only one part of recovery, and by some patients not part of recovery at all (Topor et al., 2022). Contemporary recovery models have moved beyond medically-focused symptom management, to fulfillment of personally meaningful social roles, well-being, and positive identity (Andreasen et al., 2005; Leamy et al., 2011; Topor et al., 2022). This shift to broader conceptualisation of recovery has been partly driven by advocacy from people with lived experience of psychosis and allies who are critical of the status quo and the field valuing and incorporating lived experience preferences (Davidson et al., 2005). It is now accepted that recovery from psychosis incorporates personal recovery, which encapsulates the functional and subjective aspects of recovery identified as most important by people with lived experience of psychosis (Windell et al., 2012). Treatment focused on personal recovery recognises that this is a unique journey and gaining or maintaining empowerment is fundamental (Anthony, 1993; Leamy et al., 2011). Very recent definitions go beyond an individualistic focus to recognising recovery as a dynamic relational and cultural process, influenced by the social context within which one lives (Topor et al., 2022). Taking antipsychotic medication is not necessarily an essential component of psychiatric rehabilitation and symptom resolution is not necessarily a prerequisite for functional or personal recovery (Herrman et al., 2023). Psychosis treatment, including psychiatric rehabilitation must continue to evolve to promote the recovery needs and preferences of those affected and acknowledge how they are affected within particular social

contexts, which may include non-normative recovery that is “de-psychiatrized” (Topor et al., 2022).

Many people who take antipsychotic medication report dissatisfaction with this medication and want to reduce or stop taking it (Crellin et al., 2022; Larsen-Barr et al., 2018). A survey of 832 antipsychotic users found that 70% wanted to stop (Read & Williams, 2019). Furthermore, reviews have estimated 29-41% of people with psychosis do not take antipsychotics as prescribed (Lacro et al., 2002; Nose et al., 2003). Some individual studies report even higher rates, with 74-90% of people discontinuing their antipsychotics (Lieberman et al., 2005; Mullins et al., 2008). A recent study showed that the mean time to medication non-adherence following a first-episode of psychosis is 10-months (Daneault et al., 2019). Clinicians report being somewhat supportive of antipsychotic dose reduction (Cooper et al., 2019; Murray et al., 2016) and psychiatrists commonly commence dose reduction within months of remission following a first-episode psychosis in accordance with patient wishes (Kikkert et al., 2022). Thus, there is some tension between clinical practice guidelines and real-world preferences and practices (Thompson et al., 2016).

It is critically important that clinicians have clear evidence about dose reduction and how to best implement it, including strategies for addressing structural and organisational barriers to reducing antipsychotics. Ethical practice is inherent to this and guides all clinicians who work with and support people with psychosis in their recovery. A person’s desire to reduce antipsychotic use may be viewed as a moral dilemma when this contradicts clinical practice guidelines and clinical experience, and when the evidence base lags. The aim of this paper is to use principlism to interrogate the evidence and practice of antipsychotic dose reduction to understand the careful balance of evidence-based practice and supporting patient choice and self-determination in psychiatric rehabilitation. Specifically, we focus on the four-principles approach to biomedical ethics: autonomy, non-maleficence, beneficence, and justice (Beauchamp & Childress, 2019; Figure 1). We focus on principlism because these four ethical principles are commonly formalised within medical and allied health professional codes of conduct. Out of scope is the ethics of dose reduction within research, including using placebo in antipsychotic medication trials (see Carpenter et al., 2003; Zipursky & Darby, 1999 for discussion).

**What is the current evidence of harms and benefits of antipsychotic dose reduction or discontinuation?**

To inform ethical practice and support recovery through psychiatric rehabilitation, clinicians should be aware of the current evidence on antipsychotic dose-reduction (or maintenance) and critically appraise the strength and quality of the evidence. This is especially important for evaluating the probability of balance of most benefit with least harm and being able to clearly communicate this to patients. Relapse rate is the most studied outcome of randomised controlled trials (RCTs) investigating the effects of antipsychotic dose reduction and discontinuation. This large body of research synthesised in several systematic reviews and meta-analyses, shows that the chance of relapse is reduced by around half with antipsychotic maintenance compared with antipsychotic reduction or discontinuation (Kishi et al., 2019; Leucht et al., 2012; Ostuzzi et al., 2022). A recent network meta-analysis of 98 RCTs found that maintaining or switching antipsychotic medication was associated with the lowest risk of relapse, followed by dose reduction, and lastly full discontinuation (Ostuzzi et al., 2022). Furthermore, relapse risk was shown to be higher if antipsychotic dose is reduced <50% of the recommended dose for the acute phase, compared with 50%-99% of the recommended dose (Højlund et al., 2021). Leucht et al. (2021) concluded that caution is needed for dosages <2.5mg/d risperidone equivalent due to the disproportionately higher risk of relapse in remitted individuals below this dose. Worth highlighting is that most (95%) of the findings of these reviews come from studies of adults with multi-episode or persistent schizophrenia-spectrum disorder. Many participants were taking antipsychotics for several years (i.e., average ~12 years). The period of follow-up was <12-months in 82% of these studies, therefore much less is known about longer-term outcomes. Moreover, abrupt discontinuation occurred in about two thirds of these studies, with the remainder employing rapid tapering (Højlund et al., 2021; Ostuzzi et al., 2022). An ‘inflated’ estimate of relapse risk is possible in these reviews, due to potential ‘withdrawal-related’ adverse effects associated with abrupt/rapid discontinuation and receptor supersensitivity (Horowitz, Murray, et al., 2021; Sommer et al., 2022). A recent individual participant data meta-analysis showed that both a longer duration of treatment prior to antipsychotic discontinuation and abrupt discontinuation were associated with higher probability of experiencing new adverse events (i.e., likely withdrawal effects) after discontinuation. This suggests more gradual reduction, particularly for those with a longer treatment history, may result in fewer adverse events (Brandt et al., 2022), including relapse itself. Indeed, a recent review showed that tapering over several months versus tapering more quickly halved the relapse rate in chronic schizophrenia (Bogers et al., 2023). Furthermore, 40% of first-episode patients whose antipsychotics were discontinued had not experienced a

relapse by 2-year follow-up (Kishi et al., 2019), revealing a subgroup of people for whom antipsychotic maintenance may not be needed and where potential adverse effects of antipsychotics can be prevented. Together, the evidence suggests that there is an increased risk of psychotic relapse following (rapid) dose reduction or discontinuation and this must be communicated clearly to patients. However, relapse is not inevitable, particularly if tapering is done very slowly and is led by patient choice as shown by a recent trial (Liu et al., 2023).

Relapse, however, is not the only outcome of interest to people with psychosis who take antipsychotics, with functioning, cognition, and physical health also high among their treatment and recovery priorities (Bryce et al., 2023; Iyer et al., 2011; Moritz et al., 2017; Ramsay et al., 2011). Antipsychotics can cause unpleasant metabolic and physical side-effects, such as weight gain, sexual dysfunction, and movement disorders (Leucht et al., 2013; Leucht et al., 2012). While some of these side-effects are believed to be linked to the observed reduction in life expectancy, naturalistic data has suggested that better morbidity and mortality outcomes are associated with taking antipsychotics (Correll et al., 2022; Taipale et al., 2020). However, these observational studies are subject to various biases (Moncrieff & Steingard, 2019; Whitaker, 2020), with more data needed from RCTs. People can also experience undesirable cognitive, emotional, and motivational effects from antipsychotics (Barbui et al., 2005; Read & Williams, 2019; Thompson et al., 2020). Naturalistic studies have shown better cognitive outcomes for those with lower antipsychotic exposure at long-term follow-up (Albert et al., 2019; Husa et al., 2014); although again, biases such as confounding by indication limit interpretation. A recent RCT showed a decline in verbal memory in first-episode patients who were randomised to antipsychotics whereas those who received placebo improved (Allott et al., 2023).

There are relatively few RCTs of antipsychotic maintenance versus reduction/discontinuation focused on these other person-centred outcomes. A landmark Dutch study by Wunderink et al. (2013), followed-up 128 people with first-episode psychosis for seven years, who had participated in a 2-year RCT of antipsychotic dose reduction versus maintenance. Recovery (defined as symptomatic remission plus no significant disability in multiple functional domains) was twice as likely in the dose reduction versus antipsychotic maintenance group. There was no group difference in relapse rate (32% dose reduction; 35% maintenance). In contrast, Hui et al. (2018) followed-up 178 people with first-episode schizophrenia for ten years, who had participated in a 1-year RCT of antipsychotic discontinuation versus maintenance in Hong Kong. Poor clinical outcome (composite of persistent psychotic symptoms, need for clozapine treatment, or death by suicide) was almost

twice as likely in the discontinuation (39%) than maintenance group (21%). The functional outcomes did not differ at follow-up, with ~70% being in employment regardless of group. Notably, tapering was quicker (over 6 weeks) than Wunderink et al. and participants completely discontinued, whereas in Wunderink et al. many in the dose reduction group did not completely discontinue. Recently, in Taiwan Liu et al. (2023) investigated two-year relapse and functioning outcomes of 96 symptomatically stable people with schizophrenia in a RCT of slow guided dose reduction versus maintenance, alongside a naturalistic maintenance group. Relapse rate was low overall (14.6%) with no group difference, and functioning and subjective quality of life improved across both randomised groups, although quality of life was significantly improved only in the dose reduction group (Liu et al., 2023). On the other hand, an RCT conducted in the UK found a higher rate of relapse in people allocated to gradual antipsychotic reduction and discontinuation compared to maintenance treatment with no difference in social functioning, quality of life or symptoms at 2-year follow-up (Moncrieff et al., 2023). The contrasting results might be explained by the more substantial and faster reduction and higher rate of discontinuation in the latter trial.

Several RCTs have examined cognitive functioning following antipsychotic dose reduction versus maintenance. Despite variation in setting, sample, and methods, preliminary evidence suggests that antipsychotic dose reduction leads to improvements in cognitive functioning (i.e., global cognition, processing speed, memory) at 5- to 12-month follow-up (Faber et al., 2012; Hori et al., 2013; Stürup et al., 2022; Takeuchi et al., 2013; Zhou et al., 2018). Some of these studies also showed superiority of tapering over maintenance for negative symptoms (Takeuchi et al., 2013; Zhou et al., 2018) and daily living and work skills (Hori et al., 2013). Relevantly, antipsychotic dose reduction was performed gradually in most of these studies and was not associated with increased psychotic symptoms or relapse. Together, these findings provide promising evidence for the benefits of dose reduction across broader rehabilitation outcomes. Importantly, most clinicians welcome evidence from RCTs to support their practice (Cooper et al., 2019; Hui, Wong, et al., 2019; Thompson et al., 2016; Yen et al., 2022). Clearly more trials are needed that focus on outcomes other than relapse. Encouragingly, several RCTs are underway and will provide further evidence of the risks and benefits of gradual reduction or discontinuation (Begemann et al., 2020; Koops et al., 2023).

### **Respect for autonomy.**

Respect for autonomy or self-determination is a fundamental ethical principle within medical practice (Beauchamp & Childress, 2019) and strongly aligns with the goals of



psychiatric treatment and rehabilitation. This includes respect for the moral and legal *right* of people to make independent and informed decisions about their care, including their preferences about medication and how that aligns with their goals and values. Importantly, the right to choose does not mean individuals have a mandatory *duty* to choose or to receive information (Beauchamp & Childress, 2019). For example, attitudes towards medical decision-making can be influenced by ethnicity or culture, where greater emphasis may be placed on family-led decisions. Furthermore, some people may not want to know the risks (or benefits) of a particular treatment and have a clear preference regardless, or alternatively, prefer to leave treatment decision-making to medical professionals. Respecting the principle of autonomy means being fully aware of and respecting a person's preferences, even if they oppose the clinician's perspective (Murray & Di Forti, 2018). Clinicians are obliged to inquire about a person's preferences, if and how they would like to receive information, and who they would like involved in making decisions.

In most jurisdictions, doctors (psychiatrists) also have a statutory role in compulsory treatment, placing them in a position of paternalism, which can appear to undermine the principle of autonomy. However, in the case of compulsory treatment, psychiatrists are also balancing the principles of beneficence and non-maleficence and are legally permitted to restrict autonomy in some cases, while also being obligated to consider the least restrictive options. Importantly, a history of compulsory treatment (e.g., with medication) may influence a person's recovery goals, including their opinions and choices about reducing antipsychotic medication (Grünwald et al., 2021; Grünwald & Thompson, 2021). Even when a patient is deemed legally incapable of providing informed consent, their preferences should not be ignored, and their assent/dissent should still be heard and respected whenever possible.

Upholding the ethical principle of autonomy also relies on the ability to make an informed decision (i.e., informed consent) about one's treatment. Making an informed decision is impacted by the information provided (i.e., being fully informed) and the mental capacity of the person making the decision. Capacity can be affected by factors such as age/maturity, literacy, cognitive function, acuity of symptoms among others. Treatment decisional capacity involves *understanding* the information provided about one's diagnosis and treatment, *appreciating* one's circumstances and the consequences of their choices, *reasoning* about the potential risks and benefits of one's choices in light of their values and goals and *freely expressing a choice* about treatment (Beauchamp & Childress, 2019; Grisso & Appelbaum, 1998). Cross-sectional research using formal capacity assessment tools has shown that treatment decision capacity can be impaired in up to half of youth and adult

inpatients with psychosis (rates may be lower in outpatients) and is associated with features of the illness including clinician-rated reduced insight and cognitive impairment (Killey et al., 2022; Spencer et al., 2017). Importantly, the conflation of ‘insight’ and ‘capacity’ has received criticism from people with lived experience (Hart et al., 2018). Insight into the presence of a condition is not a pre-requisite for having capacity to decide about modifying treatment. Put another way, reduced insight and cognitive impairment do not automatically mean someone lacks capacity to make treatment decisions (Hart et al., 2018) but may signal the need for greater support in decision-making. Alongside this, clinician expectations of lack of capacity or insight can lead to paternalistic attitudes which do not facilitate patient participation in the decision-making process (Grünwald et al., 2021; Grünwald & Thompson, 2021). Clinicians must assume capacity, and if concerned assess capacity, and make every effort to support people deemed to have impaired capacity to make informed treatment decisions. Tailored support for decisional capacity might involve peer support, repetition, reduction/simplification of information (including avoiding jargon) and visual aids (e.g., infographics, videos). Even brief interventions are shown to be effective for improving decisional capacity in schizophrenia (Dunn & Jeste, 2001; Moser et al., 2006).

There are additional autonomy considerations when psychosis onset and treatment occur during adolescence, which is common (Solmi et al., 2022). Consent to medical treatment in many countries is typically provided by parents/legal guardians until age 18. Nevertheless, clinicians can foster autonomy by including young people in decision-making and respecting their preferences and experiences. The framework for shared decision-making (discussed below) involves the clinician translating the evidence into readily understood information in an unbiased way and understanding the experiences, values, and preferences of the adolescent and their parent/guardian. This approach acknowledges that autonomy is developed incrementally rather than obtained at 18 years. There are circumstances when a young person (<18 years) is legally considered capable of making treatment decisions without the consent or knowledge of their parent/guardian, termed ‘Gillick competent’ or ‘mature minor’; *Gillick v West Norfolk* (AHA, 1985). There are no standards for establishing Gillick competence, however there should be evidence of “sufficient understanding and intelligence to enable [them] to fully understand what is proposed” (AHA, 1985). In the context of psychosis, establishment of Gillick competence may be complicated by the impact of the condition on the young person’s social, emotional, and cognitive development. An earlier age of psychosis onset may be associated with more severe cognitive impairments

(Hafner et al., 1995), potentially impacting the capacity for informed consent. However, capacity is not a fixed trait and should be regularly reviewed.

Shared or supported decision-making are processes that can support informed consent and autonomy (Simmons & Gooding, 2017). Shared decision-making supports collaborative decision-making between patients and clinicians, where a patient's priorities and lived experience significantly contribute to the decision-making process (Charles et al., 1999; Elwyn et al., 2017). Shared decision-making can positively influence a person's subjective sense of involvement in treatment, self-efficacy, and autonomy (Stovell et al., 2016). Shared decision-making can be facilitated by decision aids, evidence-based tools which assist discussion of different treatment options, identify personal values, and support the patient to reach a decision (Elwyn et al., 2017). Several decision aids have been developed for people with psychosis (Müller et al., 2023), with one specifically intended to address the decision of continuing, adjusting, or discontinuing antipsychotics (Zisman-Ilani et al., 2018). The feasibility and effectiveness of this decision aid to promote shared decision-making for young adults with first-episode psychosis is being investigated (Zisman-Ilani et al., 2021).

A large survey of psychiatrists showed that the use of shared decision-making in practice varied depending on the topic and patient characteristics. For example, psychiatrists reported they were less likely to employ shared decision-making when the topic involved antipsychotic medication and when people were perceived to have lower decision-making capacity (Hamann et al., 2009). This is concerning and undermines the principles of autonomy and justice (described later). In discussing decisions regarding medication, doctors must strive to outline all available options (including doing nothing), potential harms and benefits of each option (compared with doing nothing), and how likely those outcomes are for the patient. When considering the likelihood of outcomes, it is important that the clinician highlights that they do not know exactly what will happen, and the evidence only informs the likelihood of these potential harms and benefits. This may include discussing how similar the person is to participants in the studies providing the evidence; sometimes there are considerable demographic and clinical differences, which should be acknowledged.

They should also inform individuals of the alternatives to maintenance medication and the risks and benefits of these alternatives. For example, a targeted approach, employing antipsychotics when psychotic episodes occur rather than open-ended prophylactic treatment has been suggested by several commentators as a substitute for ongoing maintenance treatment, although the evidence is mixed (Davidson, 2018). Another example is psychological therapies that target concerns that are of high priority to patients, such as

insomnia, worry, decision-making or coping with voices (Freeman et al., 2019) or other intensive psychosocial treatments and psychiatric rehabilitation, such as CBT, group programs, or employment support, delivered without or with minimal antipsychotic medication have been found to be effective for some people with psychosis (Cooper et al., 2020; Francey et al., 2010; Francey et al., 2020; Jauhar & Lawrie, 2022).

Additionally, advanced statements (also called advanced directives) are a legal mechanism that can support autonomy and informed decision-making (Simmons & Gooding, 2017), including antipsychotic use. Advanced statements involve documenting, during periods of stability, a patient's treatment preferences should a mental health crisis occur, facilitating their autonomy and active participation in future treatment decision-making (Braun et al., 2023). They are particularly useful for people with mental illnesses such as psychosis, which may affect their capacity to consent/make decisions in the future (Braun et al., 2023). Advanced statements can be created by patients themselves or with the support of another person, such as family member, peer/support worker, or mental health professional (Braun et al., 2023; Gaillard et al., 2023). Braun et al. (2023) found high interest in using advanced statements among people with mental illness, and that advanced statements would increase their sense of autonomy and control, enhance communication with professionals during a crisis, and avoid involuntary hospitalisation and unwanted medication. People with psychosis report that advanced statements may improve the consistency of care across their treating team, facilitating stability (Valentine et al., 2021). Caregivers and family members have identified that advanced statements may improve understanding of their family member's treatment preferences, allowing them to more easily advocate on their behalf (Valentine et al., 2021). In a systematic review, Gaillard et al. (2023) found large variation in the content of advanced statements, indicating preferences in advanced statements are highly personal. Individuals tended to express clear and detailed reasons for their treatment preferences, which were often based on previous experiences with hospitalisation and adverse medication effects. Concerningly, advanced statements were rarely used or complied with when they expressed the individual's wish to decline all psychiatric medication or mental health treatment (Gaillard et al., 2023).

Respect for autonomy is an active and ongoing process. Beliefs, choices, and recovery and rehabilitation goals can change over time, as can capacity for making treatment decisions. Maintaining autonomy requires provision of the latest evidence and ongoing assessment of a person's decision-making capacity and preferences.

**Non-maleficence and beneficence.**

Clinicians must seek to protect the interests of the people they treat. This can be challenging when it is not clear whether continuing or tapering is the best option, that is, when there is clinical equipoise. The non-maleficence principle is the obligation of clinicians not to (unnecessarily/unjustifiably) cause or inflict harm (Beauchamp & Childress, 2019). That is, they must intentionally refrain from actions that cause harm, which can be psychological, physical, social, or functional. Beauchamp and Childress (2019) explain that harm is a contested concept but includes “significant bodily harms and setbacks to other significant interests” (p. 1159). Thus, a key concern of many psychiatrists regarding antipsychotic tapering or discontinuation, is the potential to cause harm by increasing the chance of symptom exacerbation or psychotic relapse (Kikkert et al., 2022; Moncrieff et al., 2020). Fewer also believe that a person may experience poorer personal, social, and vocational functioning if medication is discontinued (Kikkert et al., 2022). However, taking medication can also be associated with adverse effects. If a competent person makes an informed decision to reduce or stop their medication and this results in symptom exacerbation or relapse, the clinician is supporting autonomy. Furthermore, not supporting the wishes of a (competent) person to reduce antipsychotics may in fact increase their likelihood of stopping medication without medical guidance, which in turn may increase the risk of relapse (Grünwald & Thompson, 2021; Horowitz, Jauhar, et al., 2021). It may also harm the therapeutic alliance, as well as psychological factors such as self-determination.

The principle of beneficence in medicine is a moral obligation to promote a person’s welfare. As with non-maleficence, reasonable steps should be taken to i) prevent harm, ii) remove harm, and provide benefits from the treatments provided (Beauchamp & Childress, 2019). Benefits can be psychological, physical, social, or functional. In the case of a person requesting reduction in antipsychotic medication, a reasonable action for clinicians would be to consider the potential benefits of reducing medication, such as alleviating unpleasant side-effects, reducing internalised stigma associated with taking medication, and improving motivation, cognition, functioning, and quality of life. These benefits may align with and support rehabilitation goals. Benefits to therapeutic alliance and trust between patient and doctor may also ensue (Grünwald et al., 2021; Haugom et al., 2022). Indeed, many clinicians generally want to support dose reduction and are aware of the potential benefits, but fear the risks as described earlier (Cooper et al., 2019; Hui, Wong, et al., 2019; Kikkert et al., 2022; Thompson et al., 2016). Within shared decision-making, clinicians must strive to discuss both the benefits and harms of dose reduction from the evidence and their clinical experience, but

also listen to the benefits and risks from the patient's perspective to help them reach an informed decision. Facilitating benefits or reducing harms is often not without there being some risk(s) and being appropriately beneficent requires determination of which actions produce an amount of benefit sufficient to warrant their risks, with the aim of a net benefit to the patient.

How benefits and harms are defined, interpreted and valued may vary depending on who is asked (Beauchamp & Childress, 2019; Grünwald & Thompson, 2021), their experience with the particular dilemma, and stage of the recovery journey. It also depends on temporal considerations of benefits and risk (i.e., short-, medium-, long-term). A recent survey showed that psychiatrists' support of dose reduction/discontinuation varied depending on the length of symptomatic remission, with a higher proportion likely to initiate dose reduction after a 12-month remission period (Kikkert et al., 2022). Another survey showed that psychiatrists' willingness to support dose reduction varied by their cultural background (Hui, Wong, et al., 2019). For example, psychiatrists from Asian countries had a more conservative view towards dose reduction than those from the United Kingdom (Hui, Wong, et al., 2019; Thompson et al., 2016; Yen et al., 2022).

Cultural and spiritual wellbeing must be considered in relation to non-maleficence and beneficence. It is critically important that clinicians gain a comprehensive understanding of the patient's (and if applicable, their family's) values, morals, beliefs, and goals (e.g., rehabilitation and recovery goals) in this process of weighing potential benefits and harms of antipsychotic prescribing/deprescribing. Whenever possible, a person should receive the most current and comprehensive information (evidence) on the potential benefits and risks of antipsychotic tapering. Supporting the person to appreciate these risks and harms within the context of their rehabilitation goals is important and underpins informed consent and autonomy.

Balancing the ethical principles of non-maleficence and beneficence is not straightforward, brings considerable uncertainty, and will vary from patient to patient and over time with trial-and-error. Causing harm (failing non-maleficence) can be associated with consequences, such as legal punishment, whereas failing to achieve beneficence is usually not (Beauchamp & Childress, 2019). Nevertheless, when an autonomous (and competent) person wants to reduce their medication, but this is met with refusal from a doctor to support these wishes (i.e., intentional non-acquiescence in order to prevent harm or impart benefit), strong paternalism is present and may not be justified (Beauchamp & Childress, 2019). Where dose reduction is especially challenging in psychiatry is when someone is deemed to lack insight

into the existence of their psychosis and the associated risk of harm this may bring to self and to others is judged to outweigh the benefits. Here, clinicians may be strongly influenced by the beneficence principle and may work to persuade (or compel) people to remain on their medication. Beauchamp and Childress (2019; p. 238) go further to argue that strong paternalism, that is, refusing to assist, or strongly persuading a person against, reducing their medication is only appropriate if the following five conditions are met: 1) a person is at risk of significant, preventable harm or failure to receive a benefit; 2) the paternalistic action will probably prevent the harm or secure the benefit; 3) the anticipated benefits of the paternalistic action significantly outweigh the risks; 4) there is no morally better alternative to the limitation of autonomy that will occur; and 5) the least autonomy-restrictive alternative that will secure the benefits and reduce the risks is implemented. While each of these conditions is open to interpretation, it is suggested that as the risk to the patient's (or other's) welfare increases, such as *irreversible* harm, justification of a paternalistic intervention also increases (Beauchamp & Childress, 2019).

### **Justice.**

Full inclusion in community life is a human right of people with severe mental illness, including those with disabilities (Schulze, 2016; United Nations General Assembly, 2006) and is a core principle of psychiatric rehabilitation. People have the right to access services and benefits in health, housing, education and employment, arts and leisure and standards of living, and social, political, and cultural participation without discrimination. Within psychiatric rehabilitation, upholding justice means supporting people to set their own goals, to live a life they choose and to flourish, which might include a life medication free. With respect to treatment, clinicians have a responsibility to avoid discriminating against people based on age, religion, sexuality, ethnicity, gender, disability, or any other reason. They should continually strive for fair allocation of mental health resources. This includes supporting antipsychotic dose reduction and providing alternatives when individuals request it. Unfortunately, in healthcare ample evidence shows that accessibility and the use of shared decision-making is unequally distributed with respect to race and gender (Beauchamp & Childress, 2019; Simmons et al., 2021). The research evidence that clinicians use to support shared decision-making is also unrepresentative of people globally, which is problematic (Simmons et al., 2021). While it is not clear whether demographic factors influence the willingness of doctors to support antipsychotic dose reduction, other factors, such as perceived capacity, do influence their willingness to discuss dose reduction with patients

(Hamann et al., 2009). This breaches the principle of justice; capacity can and should be accommodated whenever possible as described earlier.

Unfortunately, while clinicians acknowledge the potential benefits of antipsychotic dose reduction, they have identified several personal and system-level barriers, which make implementation difficult. For example, clinician engagement with dose reduction is hindered by a lack of practical guidelines for reducing or stopping antipsychotics (Cooper et al., 2019; Hui, Lam, et al., 2019). Studies show there are varying views among clinicians about what is appropriate in terms of who can reduce their medication and when this should happen (Hui, Wong, et al., 2019; Kikkert et al., 2022; Thompson et al., 2016). In fact, there is little evidence about who can and cannot reduce successfully, suggesting all individuals who want to reduce/stop their medication should be supported to do so.

Apart from knowledge barriers, little is known about what else influences clinician practice around antipsychotic dose reduction. One study identified clinician concerns about the impact of medication on patient quality of life (Thompson et al., 2016), while other research points to organisational barriers such as lack of resources, pressure to discharge, and poor continuity of care (Cooper et al., 2019; Moncrieff et al., 2020). Clinicians are also faced with concerns of the potential increased burden to formal and informal caregivers when assessing the potential risks of dose reduction and accordingly, may experience moral distress. Supported dose reduction requires more regular visits, closer monitoring, and additional psychosocial support (Horowitz et al., 2022), resources which a service may be lacking. In some cases, clinicians may actively discourage people from exploring dose reduction due to these barriers, compromising the principle of justice (and autonomy). Simultaneously, clinicians are motivated by non-maleficence, and it may be unethical to proceed tapering without the necessary resources to execute it safely – which ideally, should be paired with efforts to remove these organisational barriers. These constraints must be openly communicated to patients so they can make an informed decision.

### **Conclusion.**

Our goal was to probe the evidence and practice of antipsychotic dose reduction from the principlism biomedical ethics lens, specifically the core principles of autonomy, non-maleficence, beneficence, and justice. A clinician is charged with the responsibility of balancing these principles to the best of their ability when supporting a person in their recovery journey. Exploring and trialling antipsychotic tapering may be part of this process if that is the person's choice. It is important to remember that the decision to reduce or cease



antipsychotic medication does not need to be permanent and a trial period could be encouraged when there is a lot of uncertainty about the risks and benefits (Beauchamp & Childress, 2019). Slow, gradual (hyperbolic) tapering with close monitoring and psychosocial support is suggested best practice for minimising risk of relapse and practical recommendations have been provided to guide clinicians (Cooper et al., 2023; Horowitz, Jauhar, et al., 2021; Horowitz et al., 2022). Meanwhile, further research is needed on tapering outcomes other than symptomatic exacerbation and relapse, effective strategies and supports for tapering, and involvement of people from diverse backgrounds to ensure the evidence reflects the real world.

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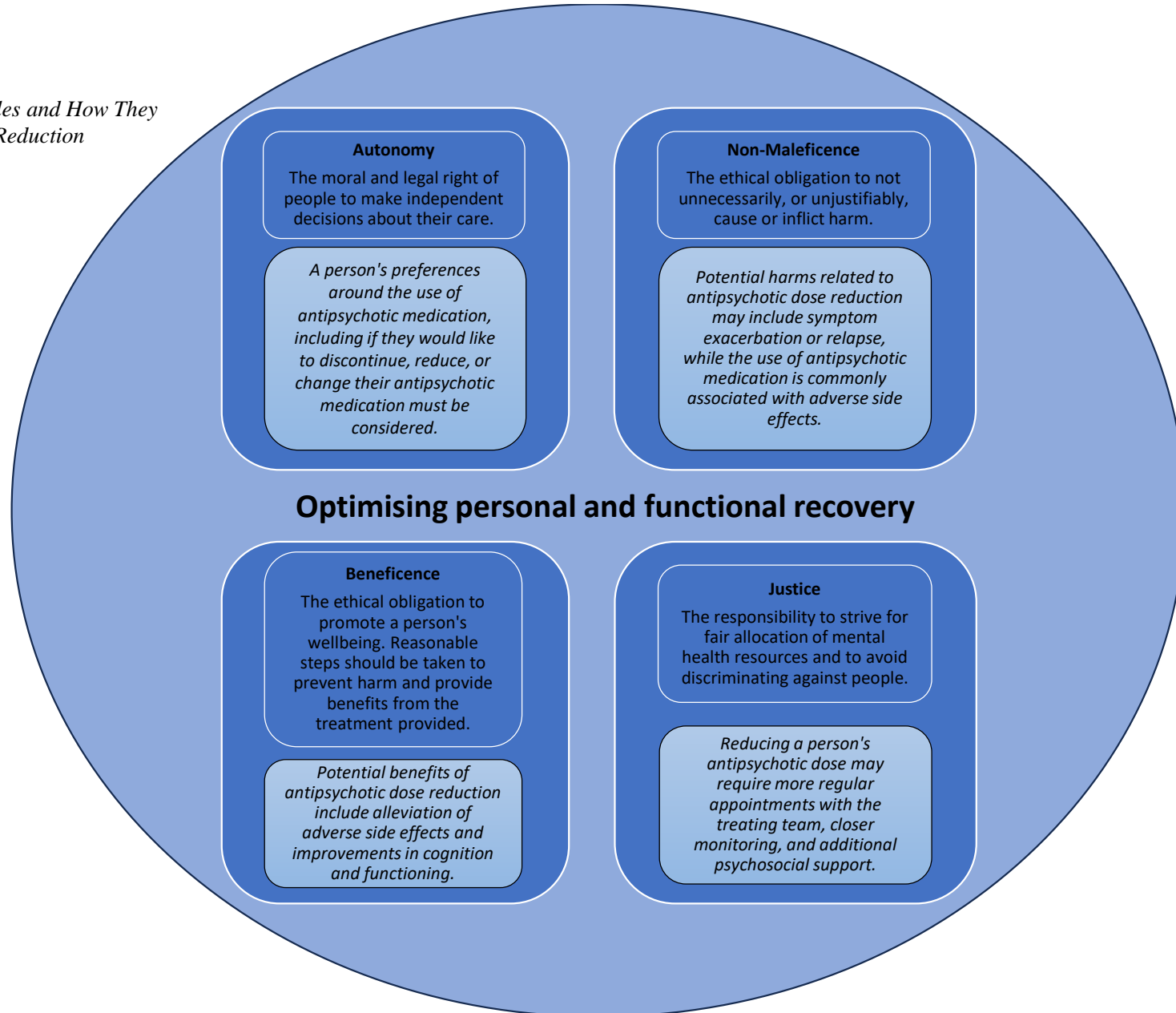


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**Figure 1**

*The Four Key Ethical Principles and How They Relate to Antipsychotic Dose Reduction*



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