Personalised care in severe mental illness – there’s no need to wait

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Repeated promises over several decades from leading academics in imaging and genetics\textsuperscript{1–3} that biologically personalised treatments were close and would be available in ‘a few years’ have not translated into routine clinical practice. Expansive claims are still made by some, though most contemporary views are more realistic about the likely contribution of such approaches in the near future.\textsuperscript{4} Such ‘biological’ approaches have substantially and importantly improved our knowledge and understanding of mental health disorders and should be recognised as having done so. It is disappointing, however, that these advances in understanding have not led to significant advances in routine clinical practice or outcomes.

Similar promises are now being made for ‘big data’ generated by electronic records systems and its ability to identify characteristics that will transform healthcare.\textsuperscript{5,6} Smart-phone technology is also being strongly promoted as the cornerstone of a ‘new era’ of healthcare, as demonstrated by a bewildering variety of apps now available.\textsuperscript{7} It is early days and some are already urging caution in interpreting the results of studies using metadata for methodological reasons.\textsuperscript{8} While there is no doubt there will be significant gains, the largely unfulfilled previous claims of the imaging specialists and geneticists would suggest we should not expect miracles.

During this prolonged period of ultimately unfulfilled claims from different disciplines, high quality evidence has steadily accumulated that does support personalised care, albeit in a different way. Numerous randomised controlled trials (RCTs) and systematic reviews have been reported that strongly support the use of specific interventions for people with specific deficits. While we may not be able to put our patients in a scanner or run a blood test to select a specially designed medication, we can sit and discuss with them a raft of evidence-based interventions that should improve well-being and functioning. This more holistic view of individualised treatment could include many elements, encompassing both whole service approaches and individual interventions targeted at specific difficulties faced by those with severe mental illness (SMI). Below we outline a few examples but the list is by no means exhaustive.

We have known for many years that patients with psychosis have poor physical health and die much younger than the general population, even after allowing for suicide. One recent study\textsuperscript{9} estimated a reduction of 18.7 years and 16.3 years in men and women with schizophrenia, respectively – a shocking health inequality. The causes for this are complex, but we have the evidence-based interventions to ameliorate or even eliminate some. Smoking cessation therapy has strong evidence in mental health services\textsuperscript{10} and can significantly reduce morbidity and mortality while conferring other benefits such as reduced financial pressures and improved self-esteem. However, we know that many patients under our care are not offered it, or are not assertively assisted to take it up. We also know that metabolic syndrome causes significant morbidity and reduces functioning and that intervening early with lifestyle support and a mindful choice of antipsychotic can minimise the damage.\textsuperscript{11} Again, we do not always do this, despite the literature clearly supporting individualised choice of medication in psychosis that takes into account side-effect profiles, efficacy, and patient characteristics.\textsuperscript{12} This evidence extends to the preferential use of long-acting injections (LAI) in those who have had repeated episodes of illness,\textsuperscript{13} another area where there is substantial variation in practice in UK psychiatry.

The evidence base for individualised placement and support is unquestionable now, with numerous RCTs and systematic reviews\textsuperscript{14} showing meaningful benefit in terms of return to functionality and employment. Contingency management is an approach in which reductions in substance misuse or improved adherence to medication may be rewarded by money or vouchers. It remains controversial and little used. This appears to be a missed opportunity given that recent empirical data, such as those from the FIAT study,\textsuperscript{15} show clear evidence of benefit.

The availability of talking therapies for people with SMI remains patchy and inadequate, with local investments in increased availability frequently appearing to be swallowed up by less unwell and more vocal groups in primary care, backed by national drivers and targets. Family therapy is a good example of a treatment that has strong evidence dating back over
three decades, but how many patients and families receive it? Though the evidence for ‘traditional’ CBT in psychosis is questionable, it is still considered by many as a mainstay in psychosis management and studies of newer variants show substantial promise. There is stronger evidence for its use in affective disorders so perhaps we should be more selective referrers and try to end the practice of just saying ‘here’s one for psychology’ in our multidisciplinary team (MDT) meetings without thinking of the evidence and how precious resources can be used to create most benefit? Perhaps we should be stronger advocates for the adoption of evidence-based recovery and psychosocial interventions, as there can be barriers due to training needs or other resource implications? This increased flexibility might serve our patients better than the current rigidity of the stepped care approach and divided and/or separate psychological services.

Not only do we have this evidence of effectiveness for a variety of interventions, we have good quality evidence to inform the way in which we deliver them. Accumulated evidence supports multidisciplinary working, outreach, and home visiting by dedicated teams with direct medical input. These key ingredients may be more important than overall service design and are often overlooked in our preoccupation with complete service models such as crisis teams, early intervention services, assertive community treatment teams and now Functional Assertive Community Treatment Teams (FACT). The increased fragmentation of services and introduction of novel service arrangements that are not adequately based on practice or research findings during times of austerity is concerning and likely to exacerbate this discrepancy between evidence and practice.

The list above is by no means exhaustive but, intelligently used within systems that support such thinking, its contents would allow for genuinely personalised care of patients with evidence-based interventions that improve functioning, reduce symptoms, and/or reduce admissions. So why do we not succeed in this aim more often? The answers to this are undoubtedly complex, but one key factor is the failure to rigorously assess and clarify strengths, weaknesses, and wider environmental and social factors at initial contact. Such clarity could be followed by an individually tailored care plan to address these needs. There is a sound rationale for assessing social, occupational and relationship functioning and several specific measures with good reliability and validity to do so. They do not take long to use. It is disappointing that despite this such measures are rarely used in clinical practice. Even when they are they often appear to be in a ‘tick box’ fashion and not genuinely to direct patient care.

Perhaps this is because it is compulsory in UK services (and many elsewhere) to use Health of the Nation Outcome Scales HONOS, or the ‘care clustering tool’ as it is now commonly known. The way it is often used to meet administrative demands does not generally enhance clinical practice and certainly does not lead to tailored and personalised care packages that are evidence based. It would undoubtedly be possible to use clustering and its associated assessment better, however, and certainly if clustering were rigorously applied it could lead to the greater use of evidence-based interventions.

We believe we could do much better, with no increase in resources, if services were allowed to choose on a rational basis which evidence-based outcome measures to use and were allowed to continue to ‘follow the evidence’ as to which interventions to use and shape the services to deliver them. By empowering staff to take responsibility for identifying desired outcomes with patients and ensuring the delivery of evidence-based interventions we can improve patient satisfaction with care, reduce inefficiency, and put the ‘smile’ back into services that have all too frequently become formulaic. Most importantly, we believe we can improve outcomes in their widest sense and we can do it now, dependent on no breakthroughs in science. These will undoubtedly come but perhaps not for some time – our patients need not wait.

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Declaration of interest
Andrew Molodynski has been involved in the development and publication of the MINI ICF social functioning measure. Rob Bale has no declaration of interest to make.

References


**POEMs**

**The use of SSRIs in pregnancy associated with preterm birth**

**Clinical question**

Is the use of selective serotonin reuptake inhibitors in pregnancy associated with a risk of preterm birth?

**Reference**


**Study design** Meta-analysis (other) Funding source: Self-funded or unfunded Setting: Various (meta-analysis)

**Synopsis**

This study was a meta-analysis of 8 observational studies (N = 1,237,669 women) regarding the association of taking SSRIs during pregnancy and preterm birth. Studies were included if they reported the rate of preterm birth among women exposed to SSRIs during pregnancy (n = 93,982) compared with untreated control patients. The untreated control groups included either all women without depression, or women with depression but no exposure to SSRIs (treated with psychotherapy alone). Two studies were of fluoxetine, 2 were of paroxetine, and the remainder were of any SSRI. Exposure to SSRIs in pregnancy was associated with preterm birth compared with no exposure (11.6% vs 5.2%; odds ratio [OR] 1.45; 95% CI 1.24 - 1.68). After adjusting for known potential confounding variables such as maternal age, smoking status, and parity the association was still statistically significant (adjusted odds ratio 1.24; 1.09 - 1.41). The analysis did not control for the severity of depression, which could be an important confounding factor. Neonates of women exposed to SSRIs also showed significant associations with respiratory distress syndrome and lower birth weight. In the comparison of SSRI-exposed women to the group of depressed women who were not prescribed antidepressants the association was smaller, but still statistically significant (6.8% vs 5.8%; OR 1.17; 1.10 - 1.25). A future re-analysis should exclude paroxetine, since it is now classified as category D in pregnancy. 