

Ethics of early prevention in schizophrenia

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Objective: To represent a cross-section of current thinking on the ethics of early (primary) prevention in schizophrenia.

Method: Ethical considerations presented at the *First Australian Schizophrenia Prevention Conference*, Sydney, March 1999, particularly from the final session on 'Ethics', are recorded here together with complementary referenced material.

Results: Ethical concerns arise in the arenas of research over clinical priorities; screening ethics, including stigma, confidentiality, informed consent and support required through waiting periods; and the ethics of prolonged assessments in the absence of disorder, the right not to know and the possible ethical prematurity or otherwise of screening for schizophrenia.

Conclusions: There are several legitimate ethical concerns that must be understood and addressed by those undertaking the developing of primary preventive measures in schizophrenia. Such measures must still be regarded as more experimental the further ahead the measures are undertaken from the onset of the disorder. Anticipatory ethical guidelines should be developed to inform such research.

Key words: ethics, prevention, schizophrenia.

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The critical issues in the ethics of schizophrenia involve a relatively low prevalence disorder that, nevertheless, has a potentially devastating effect on the quality of life of the persons concerned and their families, and a consequent loss of productivity and contribution to the community that may be nearly lifelong. There is no argument that, if there was a reasonable way to prevent schizophrenia, it is well worth the effort to do so. The early prevention paradigm promotes the idea that feasibility for screening for a psychiatric disorder could be prioritised on the basis of the following indicators: high enough *frequency* and *severity* of the disorder; *importance* as expressed by the community; '*controllability*' in

terms of whether the intervention prevents the disorder altogether or the worst manifestations of the disorder; and the cost to services [1]. While there is no question that schizophrenia would meet the severity and importance criteria, it is doubtful whether it could meet the frequency, cost and 'controllability' criteria.

Research priorities

In any systematic attempt to prevent any disorder, it is always a dilemma if research priorities dominate or appear to eclipse the prospects of each individual subject maximising their prospect of preventing the disorder personally, rather than just contributing to decreasing incidence in a wider population.

With schizophrenia, even if a low-risk status could be established on screening, it would provide no guarantee that the disorder may not emerge subsequently. Conversely, high-risk status for schizophrenia

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may be conferred on people who are still likely to not ever have the disorder emerge. At this stage, research priorities and strategies do appear to predominate in schizophrenia prevention, over clinical and practical utility to the individual, as part of a very mixed agenda. With further advances, however, this pendulum may well swing back, so the dilemma persists.

Screening ethics

Intrusion

We should consider how *intrusive* or *invasive* the screening method is, both physiologically (e.g. blood tests) and psychologically (provoking anxiety in subjects by worrying them that they may have the disease-state in question).

As pointed out by Patrick McGorry [2], the concept of ‘number needed to treat’ (NNT) to prevent one negative outcome needs to be balanced by the ‘number needed to inconvenience’ (NNI) through screening or pre-emptive intervention to prevent one negative outcome.

Stigma

The *stigma* attributed to the disorder, or even to the search for early indicators of the future disorder, can also be alarming enough for individuals or families to ‘not want to know’. This may be the case with many at risk of future schizophrenia. Even labelling a person as ‘high risk’ for schizophrenia may change the way he or she may be perceived by others [3]. Despite vigorous public education campaigns, there is still a prevailing view that psychotic disorders have gloomy prognoses and this could be compounded if such a nihilistic view was reinforced by families, general practitioners (GPs) or teachers [3]. This could result in demoralisation or even depression in individuals labelled as ‘high risk’.

Professor Tom McNeil has stated that, ideally, the identification of ‘it’ should be free of social stigmatisation and psychological damage: ‘knowing about “it” should not drive you crazy’. Nor should knowing about ‘it’ drive your parents or your children crazy [4].

Following McNeil, the key issues for predictive factors for schizophrenia here are: Can you identify ‘it’ relatively easily? Can something be done about ‘it’? And will people who know about ‘it’ choose to do something about ‘it’, to prevent ‘it’? None of these questions is readily answered for schizophrenia to date.

Waiting periods

Waiting for a screening result was described in some instances as being one of the worst periods in a person’s life, by Professor Gillian Turner [5]. The stress of not knowing whether they were going to get the disease, in this case Huntington’s Disease, was much worse than getting the information. The major cause of anxiety and stress here was the 3-month wait for test results. Tom McNeil’s analogy that you can live a long time with a toothache, but it is the day you go to the dentist that it hurts the most, is very apt. Similarly, it is somehow when you initiate the diagnostic screening process that you make the whole psychological process very acute. So, what we should now be demanding from Ethics Committees, is that anytime that screening is initiated for a disease risk factor, the medical system must guarantee psychosocial follow-up throughout and after the screening process. For schizophrenia, this entails working with both the individual and the family, as working with the family has also been recommended as an intervention to prevent the development of schizophrenia [6]. It would also entail continuing a high level of psychosocial support for the individual and family from the receiving of a positive screening result to the possible emergence of illness, at least until the highest risk period for emergence is over, or arguably over the person’s lifetime.

Screening confidentiality and setting

The setting for screening sometimes determines confidentiality. If it is attempted through schools, it is difficult to keep the process confidential, although privacy of results can be preserved by reporting them back only to individuals and families. Full confidentiality is more easily preserved if any screening process is performed via GPs or through other clinical services.

Informed consent

This should be obtained in writing from all participants, including parental consent for legal minors, in a screening program for schizophrenia, as it would still be experimental.

Implications of ‘false positive’ status

The question of limited specificity of any candidate potential screening method known so far, raises the

concern of generating a significant proportion of false positives. This group could also experience unnecessary stigma, societal or family labelling and 'medicalisation' of their condition [3].

In an attempt to minimise the 'false positive' problem, Yung and McGorry describe how their prodromal clinic follows a 'close-in' primary preventive strategy, which provides assessments in the period just before the syndrome is most likely to emerge, and adding further risk factors to enhance prediction [3].

Assessment ethics

Initial screening may lead to a full-scale clinical assessment and/or exposure to a large set of research measures.

All the aforementioned ethical considerations under 'screening' still apply. Additionally, it is worth considering how exhaustive, over-inclusive, as well as potentially intrusive, this assessment may be. Beware the comprehensive attempt to capture all possible clinical information from a person during one or two protracted interviews, including quite intimate details, and virtually never seeing that person again. Colloquially, this used to be caricatured as 'the Maudsley Rape'. There should never be a cynical sense of data-raid conveyed, with the subject feeling that this exercise was much more for the researchers' good than for the subjects'. Perceived mutual benefit is a fine interim outcome.

If the assessment interview is too prying, subjects may feel exposed and that their privacy has been invaded. If the assessment procedure is highly technical, surrounding the subject with electrodes, wires and scanning devices, some subjects may feel they are being overly objectivised or clinically pathologised, while others may be interested in the process and engaged by the technology. The assessment process may be too long, particularly if residential and institutionally based, taking the person out of their accustomed life for an excessive amount of time (e.g. 3-month hospital admissions for initial early psychosis assessment [7], although this example is of early intervention/secondary prevention assessment).

Beyond assessment

If performed insensitively, screening and assessment can be seen as the first steps downhill in a slippery slope process of 'step-wise serial discounting of the person', which may ultimately be perceived to

continue through insensitive counselling, medicating, hospitalising and, finally, compulsory detention and interventions.

The right not to know

The memory of Professor David Maddison was invoked, who tried to convince a generation of physicians and surgeons that people had a right to know if the condition detected was likely to be terminal and that the clinician should make time for this to be openly discussed with the patient. Equally, some patients made it abundantly clear during such a discussion that they did not want to know, or were not ready for, or were not hearing this information. Respect for this stance, patience and returning gently to the subject when they were more ready to listen, hear or discuss, were recommended.

Tom McNeil considered this to be one of the thornier problems of screening and suggested that mechanisms could be set up that are protective of both subjects and researchers, as the Oncogeneticists had in Scandinavia (e.g. like forming a standing reference panel of experts who can help the screeners deal with the more human aspects of providing feedback from screening). As Lisa Phillips pointed out, however, at the PACE Clinic in Melbourne where young people with probable prodromes of psychosis are monitored and counselled, many of these people are grateful for feedback from assessments, are relieved to know details of what is happening to them, and want explanations and assistance in intervening at the earliest stages, including before being diagnosed [8]. Gillian Turner gave similar accounts of people wanting to know screening results on the whole, with some exceptions [5].

Is it ethically and practically premature to propose screening for schizophrenia?

While there are emerging numerous and fairly reliable predictors of course and outcome of schizophrenia, once psychosis has emerged [9], studies of risk factors for schizophrenia have so far generated a number of testable hypotheses, but none of these rate well on specificity or predictive performance to date [10]. In the future, however, it is widely thought that molecular genetics may prove the best hope of generating an effective predictor of schizophrenia [11]. Assen Jablensky stated that he had no problem with the concept of early diagnosis and treatment, and making all agencies more responsive and sensitive,

including existing psychiatric services, counselling services, schools, etc., and encouraging people to seek help early [12,13]. But he felt uneasy with the concept of screening for psychosis because, with all the tests we have today, the odds that our prediction of a diagnosis will be wrong are far greater than the odds that our diagnosis will be correct. Furthermore, this lack of an assured diagnosis includes genetic screening or reliance on family history, even when schizophrenia has been previously diagnosed in first-degree relatives, as Jablensky has subsequently demonstrated with detailed, worked examples [12,13]. False positives will still usually far outweigh true positives. More importantly, if we design a screening program, we are soliciting people to come to us, and we are imposing our concepts on them in a way, as we want them to comply with our screening. This raises the important requirement that we should have an intervention available that is a guaranteed success, so that if people screen positive, we should be able to say to them 'if you do this, be it a pharmacological or behavioural intervention, you will not develop schizophrenia'. And we do not have that kind of intervention.

Unless we can satisfy these two requirements, is it worth bothering and worrying people with a screening process for schizophrenia, and is it ethical to do so? Probably not at this stage, Jablensky suggests, as he regards this endeavour as 'pre-experimental' [A. Jablensky, pers. comm., 2000]. Some others present at the conference consider this quest as legitimately experimental, with the proviso that these concerns are addressed.

McClelland argues that experience of other screening programs strongly cautions against the introduction of such markers for schizophrenia before the benefits and safety aspects have been clearly defined [14]. From this experience (presumably) ethical problems associated with the discovery of early markers for the development of schizophrenia could be anticipated and appropriate guidelines developed in advance of their realisation [14].

Conclusion

It is important to remember that, for many psychiatric disorders, biology is not destiny, and hence genetic vulnerability will not necessarily turn into psychiatric disorders. Akil and Watson state that 'the day may come, when a newborn would receive full information about his or her genetic structure, includ-

ing various polymorphising that may make him or her more vulnerable to...(various psychiatric) disorders' (p. 87) [15]. This, they argue, is something humanity has been seeking throughout the ages – 'self-knowledge, coupled with greater acceptance of ourselves and others, and a way of dealing with this great gift that can carry with it the burden of the deepest human suffering' (p. 87).

As some speakers in the ethics session of the conference pointed out, or implied, availability of information does not necessarily imply self-knowledge or not even always useful self-consciousness. And society has yet to learn how to handle this information about the individual without prejudice. The scientific accuracy and ethics of how we generate and use such predictive information still requires much deliberation.

There are several legitimate ethical concerns that must be understood and addressed by those undertaking the developing of primary preventive measures in schizophrenia. Such measures must still be regarded as experimental, the further ahead the measures are undertaken from the onset of the disorder.

However, it was suggested that a coalition of people who were committed to the prevention of schizophrenia, attention deficit hyperactivity disorder, autism and related disorders be formed to work towards further changes in the system to enhance early detection and intervention, while we wait for and/or join the experimental search for more specific biological methods or molecular genetic markers that may meet the full practical and ethical requirements for primary prevention. From the experience of other screening programs, ethical guidelines for the research or implementation of such candidate markers for schizophrenia could and should be developed in advance of the widespread use of these markers as screening tools.

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