EARLY INTERVENTION IN PSYCHOSIS (EIP) SERVICES,UK A CRITICAL ANALYSIS OF THE EVIDENCE

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ABSTRACT

The UK mental health reforms have attracted major government funding. This has been used to commission specialized community teams for people with severe mental illness. The reforms include changes to services for first-episode psychosis, which have gained huge consumer support. The UK service reforms are continuing, with the aim of providing services fit for the 21st century. In this article, we have reviewed the evidence which led to the establishment of early intervention services in the UK by using a selected review methodology. The review includes the historical background to EIP (Early Intervention in psychosis), what is EIP, where it originated from, what was the evidence leading stake holders to push the government to incorporate it in the National Health Policy. What policy reforms took place, and how the government went about implementing these services. We have discussed the current situation of the service. Furthermore we have discussed the gaps in the policy which have been identified. We end the paper with recommendations to policy makers.

Key Words: Psychosis, Mental Health, Early Intervention

INTRODUCTION

The recent interest in evidence-based policy making arises from the Modernising Government white paper¹, which emphasises that the Governments needs to improve the quality of its decision making. In the early 1990's when evidence based medicine was becoming popular and gaining momentum, a segment of the medical community challenged policy making by managers and policy makers, that it should equally be evidence based².

The government in the UK has embarked upon a radical plan recently for a reform of its mental health services nationwide. A key feature being the implementation of functional community psychiatric services, including early intervention and crisis resolution teams³.

Low and middle income (LAMI) countries such as Pakistan have a population younger than 45 years of age, therefore it has been suggested that globally the vast majority of individuals with first episode psychosis live within LAMI countries⁴. The need for policy guidance such as within the UK could have an important role in shaping the policies and directives for Early Intervention Services (EIS) within LAMI countries.

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The aim of the paper is to critically appraise and review the formulation and implementation of EI policy with reference to the evidence base. This will be achieved by discussing; 1) what is EIS, 2) how it originated, 3) how it became a policy issue, 4) who were the main drivers to bring it to the forefront, 5) what policy reforms took place, 6) how it was implemented and where it stands now. We will then critically discuss the gaps in the policy and identify areas for future consideration.

METHODOLOGY

LITERATURE SEARCH

We carried out a literature search on Cinhal, Embase, Psych INFO and Medline. The time period was from their date of inception to January 2013. The key words searched were 'Policy' generating a result of 24724, 46554, 42236, 50697 and 69350 articles respectively. The next key word was 'Early intervention in psychosis' generating a result of 15, 46, 71, 26 and 37 articles respectively. On combining the two key terms articles generated were 4,6,11 and 5 respectively. After removing duplication a total of 20 articles had been identified.

SELECTION CRITERIA

Papers were selected for inclusion if they reported policy. We excluded studies where the same sample had been reported in two different publications. Firstly, three reviewers (FK, AR & NG) scrutinized titles and abstracts of all references of the studies that reported on policy. In the second stage the reviewers assessed full manuscripts of all selected references independently.

STUDY DESIGN

The study used a selected review methodology. The research was conducted in two stages. The first stage

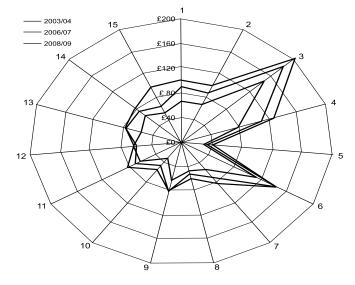
was a literature review of policy and early Intervention documents on the internet and search engines mentioned. After collecting the papers they were arranged out on the basis of their themes. The second stage was a search for the department of health and related policy documents.

REVIEW OF RELEVANT LITERATURE

The literature related to the policy on Early Intervention in psychosis services' is limited as one would expect for any new service, which has been around only for the last few years. However much of the research has suggested delivery of EIS as being a key strategy for the governments of many countries^{5,6}, therefore the need for policy development which is evidence based is important.

Out of the twenty papers which were identified only one by Joseph & Birchwood³, described the development of the policy process for EIS giving an account of various policy reforms taking place since 1999. They also described opportunities and potential difficulties faced by the service.

Another key source of input into policy development in EIS has come from working with parents and carers⁷. The importance of using evidence based research, more specifically the Cochrane paradigm has been advocated as being the ideal mechanism and systematic approach to influencing and refining decisions on health system reforms⁵. Other means of deriving policy from research have used both a 'top down' (published evidence) and 'bottom up' (stakeholders perspectives) within EIS6culminating a strategy for development of interventions which are in line



with current policy and informing and developing future policy.

In addition two papers on justification of an early psychosis diagnosis debated for and against the concept^{9,10} with its implication for future service development and allocation of resources. Kelly et al¹¹ gave an interesting and useful account of the rural perspective of EIS services indicating that the policy has overlooked this area and needs to review its input into rural services in UK. The aim of this paper was to go through the policy process of the development of EIS services in the UK, with a view to critically consider the evidence which has been presented to policy makers for this service. We also hope to identify gaps in the policy with a view to make specific recommendations.

THE RATIONALE FOR EARLY INTERVENTION: WHY AND HOW IT BECAME A POLICY ISSUE? WHAT IS THE EVIDENCE?

The critical period hypothesis

Literature shows that long-term follow-up studies have clearly shown that the outcome at 2 to 3 years strongly predicts the outcome 20 years later¹² and that disability "plateaus" during this time: hence the early phase is indeed a "critical period"¹³. It has been speculated that untreated psychotic illness has a toxic effect on the brain hence decreasing its functioning in the long term¹⁴. It is recognized that intense, sustained interventions are required during this critical phase. Most early intervention

- 1 Infections diseases, disorders of blood, endocrine, nutritional and metabolic problems
- 2 Cancers and tumours
- 3 Mental health disorders
- 4 Learning disabilities and neurological problems
- 5 Problems of vision and hearing
- 6 Problems of circulation (CVD)
- 7 Problems of the respiratory system
- 8 Dental problems
- 9 Problems of the gastrointestinal system
- 10 Problems of the skin, adverse effects and poisoning
- 11 Problems of the musculoskeletal system (excludes trauma)
- 12 Problems due to trauma and injuries (includes burns)
- 13 Problems of the genito-urinary system (except fertility)
- 14 Maternity and reproductive health and conditions of neonates
- 15 Healthy individuals and social care needs

Expenditure by programme budget category, selected groupings, £s per head, 2003/04 to

2008/09

Source: HC Health Committee Public Expenditure on Health and Personal Social Services 2009; DH Programme Budgeting Data

Notes: i) Expenditure classified to the category `other` is not included in the chart. This category comprises around 20% of total programme budget expenditure

ii) Growth in social care expenditure is partly affected by a change in calculation methodology, which arose following the move to Area Based Grant funding to Local Authorities in 2008/09.

programmes last for about two years, and few studies have looked at longer-term outcomes¹⁵.

Cost to society-the economic evidence

The costs for the NHS accounted for 38%, local authorities 12%, Home Office 1% and indirect costs due to lost productivity accounted for 49%. Of the NHS costs 69% were due to hospital admissions, 26% for hospital visits (outpatient, day ward and day centre attendances) and 2% for medication¹⁶. Hence NHS expenditure and lost productivity were considered to be the major factors causing considerable burden to UK society, adding incentive to get patients back into active employment and subsequently reduce this burden. Expenditure by category¹⁷. In the period of 2008/09, the biggest spending category has been mental health problems. NHS expenditure has increased from £148 in 2003/04 to £200 per person in 2008/09.

The economic impact of schizophrenia may be divided into (1) direct costs, those associated with the diagnosis, therapy and rehabilitation of the illness (pharmacological prescriptions, visits by a specialist, hospitalizations, etc.), non-medical costs required for the management of the patient (for example travel costs) and (2) indirect costs, those associated with the impairment of the working ability of the patients, as well as with the reduction in working possibilities of their care-givers¹⁸.

WHO ARE THE DRIVERS FOR THE POLICY

The Public - Family and carers

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'RETHINK', previously known as the National Schizophrenia Fellowship is a campaigning UK mental health charity. They initiated a campaign 'reaching people early' highlighting the typical delay of 12 months between onset of first positive symptoms and their first treatment and increasing awareness of present mental health services available to young people with severe mental illness¹⁴.

MENTAL HEALTH PROFESSIONALS

Early detection of psychosis has been a hot topic of research by the medical profession and first episode psychosis is being looked at in a more sophisticated manner with highly specialised assessment tools research has shown that the longer psychosis remains untreated the more neurotoxic effects it has on the brain thus reducing the chances of a full recovery¹⁵. The mental health workers are always open and enthusiastic to try new forms of management in improving the quality of their patient's lives.

Performance Indicators for the Early Intervention Service

Reduction in the duration of untreated psychosis (DUP)

The Early Intervention Service will aim to bring about

a reduction in DUP by one third in comparison to the DUP of people who had their first episode of psychosis in the year before. DUP (duration of untreated psychosis)¹⁹ is the time from when the first psychotic symptom emerges to the time treatment (antipsychotic medication) is received. This time was reported to be of a mean duration of 124 weeks¹⁴.

Mental Health Policy Implementation Guide (PIG) March 2001

Department of Health published a more comprehensive guidance for local services in the form of the PIG which included service specifications for the identified specialized community services, including a plan for the early intervention in psychosis services also. The Mental Health Policy Implementation Guide sets out who is suitable for the early intervention service, what it intends to achieve and what it does; it also outlines the management and operational procedures and provides references to the evidence.

Significance of early intervention in the new policy

A key feature of the nationwide reform of mental health services was the establishment of 50 early intervention services by 2004. The aim was that by 2004, every young person with a first episode (FEP) of psychosis would receive the Early and intensive support they need from a specialist team and this support would continue to help them through the first 3 years of their illness²⁰.

Number in remission

The service will aim for at least 50% of clients to have achieved remission of symptoms one year after entry into the service.

Social inclusion

The service will also examine its effectiveness in relation to specific social inclusion targets, particularly employment. In addition the level of activity will be continuously monitored, for example numbers referred accepted and discharged, and current caseload.

POLICY REFORMS

National Service Framework (NSF) for Mental Health

In 1999 the National Service Framework for Mental Health was issued²¹.The NSF sets out national standards for the mental health services. These standards are based on the best available evidence and supported by new investment of resources. This is also backed by new legislation which is suitable for modern patterns of service delivery

The National Health Service (NHS) plan

In July 2000 the next important step taken by the government was publishing a plan for the National Health

Service²⁰ in this document the plan for next 3 years was set out. Although much of the plan was concerned with structural and cultural changes for the health services as a whole; however it identified 3 areas of clinical priority:

- 1. Coronary artery disease
- 2. Cancer
- 3. Mental health.

IMPLEMENTATION OF EARLY INTERVENTION SER-VICES BY THE GOVERNMENT

The NHS allocated \pounds 70 million for the establishment of 50 Early Intervention In Psychosis (EIP) services in UK which would cater for an age range of 14-35 years with:

- first presentation of psychosis
- Or during first three years of a psychotic illness.

Tiffin and Glover²² have carried out a service mapping survey to evaluate the extent to which the Government plans for early intervention in psychosis services have been carried out in England. They collected Data from the quarterly performance monitoring of Mental Health Mapping Exercise and Department of Health. They used a semi-structured interview with the nine regional early interventions in psychosis leads from the National Institute for Mental Health in England. This was done to ascertain their views and experiences regarding early intervention in psychosis service development. The Results show that by 2006, 118 teams were operating. However, the staffing and skill mix of each varied considerably with only half reporting that they met the criteria set out in the original policy guidance. The authors concluded that although an impressive number of services have been developed, concerns around their size, configuration and functional capacity still remain.

FUTURE EVALUATION OF THE SERVICE

The UK Department of Health (DoH) has through its national research and development program, commissioned an independent and expert review of the evidence. DoH granted funding for a long term evaluation of the services²³ called the National Eden Project.

The evidence and information available for EIS has been able to set a clear policy goal, which appears to be achievable. This evidence is available in the form of research, stakeholder's opinion, economic and statistical modelling, public beliefs and perceptions and cost-benefit analyses.

Clearly, the case for cost-effectiveness of El for psychosis has not been made, and similarly the argument that cost savings from El would be available for reinvestment in other services is not based on credible evidence. This does not mean that El for psychosis should be abandoned, nor that cost advantages of El can be ruled out. It means that the quality and strength of the evidence concerning the relationship between the costs and the utility of El is lacking²⁴.

IDENTIFYING THE GAPS IN THE POLICY:

Bounded rationality is evident in several aspects of the EIS policy. These are listed below

- 1. The incidence and prevalence of early psychosis is still ambiguous and there is no general consensus on it. It can vary from area to area, thus requiring a distribution of resources on a needs basis. The policy has not taken this factor into account leaving certain high prevalence areas struggling for resources and funding.
- 2. The policy does not take into account the huge geographical distribution of the rural community in UK¹¹. The policy needs to look into different models of service delivery to these areas if it really wants to make a difference in the lives of service users residing here. The issues of transportation and availabity of local services to maintain the continuity of care needs to be made top priority. Some policy makers strive for social or financial effectiveness rather than maximising clinical effectiveness. Their goals are different from the goals of the street level bureaucrats.
- 3. Current government funding is for services between the age range of 14-35 years. Unfortunately psychosis does not recognise the NHS age cut off of 14-35 years which is not strictly inline with the prevalence of psychosis. Psychosis can occur as early as 11 years and as late as 55 years²⁵.Policy makers need to be made aware of research evidence of professionals in the field and not depend on people who have no experience of the field putting policies forward. Also high turnover of staff, lack of experience in a particular field, unclear messages and time constraints26 can lead to evidence getting lost or being overlooked
- 4. Stigma associated with the diagnosis needs to be managed if the government wants to get the maximum benefit from the service. According to McGorry⁹ clinical staging should be strongly embraced as treatment needs differ according to whichever stage the illness is at staging reduces stigma, it allows for people who have been wrongly diagnosed to exit from the services, it promotes the study of new and novel interventions. Provides more consumer choice, and allows for sequential specialisation of care.
- 5. Effective leadership for the services has been highlighted in Tiffin's²² service mapping exercise as an important component for the viability and funding of these service. Research evidence can be dismissed as irrelevant when it comes from a different specialty or sector, the leadership roles need to be with individuals who have Early Intervention as an area of special interest so that justice can be done to the cause.

CONCLUSION

There are a number of important recommendations, which can be derived based on the evidence for policy directives within the UK, as the evidence suggests there is a need for the continued updating of policies which allows for gaps in policy to be addressed. In addition the beneficial impact of policy design and implementation as reviewed within the paper provides LAMI countries, such as Pakistan a basis to develop El services, as has been suggested that public health within the LAMI countries should be prioritised⁴. The EI movement within the UK was initiated by stakeholders and service users as outlined, however this was based on limited research evidence. Considering the current huge mental health gap both in research²⁷, and service development²⁸, LAMI countries such as Pakistan may decide to introduce modern psychiatric services such as EIS based on the evidence base which has been developed through research conducted in high income countries.

FUTURE RECCOMENDATIONS

Community/networks approach highlights the role of different interests of a range of interconnected stake holders. It also indicates the particularly powerful long term relationships between government officials and the representatives of leading interest group²⁹. In the policy debate most notice is taken of this type of network in the agenda setting of policies. Strong networking between the public, government and health professionals needs to happen. Strategic collaboration with mental health service providers and conduct of large-scale quantitative studies is required in order to identify prevalence and regional variation. Distribution of services according to the need can be another focus for the service policy. Strategies to reduce the stigma towards mental health disorders and cultural sensitive services need to be at the forefront of the policy. Future research needs to be conducted to understand the sociocultural aspect of the interventions.

REFERENCES

- 1. Blair T. Modernising government. London: The Stationery Office; 1999.
- Walshe K, Rundall TG. Evidence-based management: from theory to practice in health care. Milbank Q 2001;79:429-57.
- Joseph R, Birchwood M. The national policy reforms for mental health services and the story of early intervention services in the United Kingdom. J Psychiatry Neurosci 2005;30:362-5.
- Farooq S. Early intervention for psychosis in low- and middle-income countries needs a public health approach. Br J Psychiatr 2013;202:168-9.
- McGorry P. At issue: cochrane, early intervention, and mental health reform: analysis, paralysis, or evidence-informed progress? Schizophr Bull 2012;38:221-4.

- Ghio L, Natta W, Peruzzo L, Gotelli S, Tibaldi G, Ferrannini L. Process of implementation and development of early psychosis clinical services in Italy: a survey. Early Interv Psychiatry 2012;6:341-6
- McFarlane WR, Lynch S, Melton R. Family psychoeducation in clinical high risk and first-episode psychosis. Adolesc Psychiatry 2012;2:182-94.
- Bradshaw T, Wearden A, Marshall M, Warburton J, Husain N, Pedley R, et al. Developing a healthy living intervention for people with early psychosis using the Medical Research Council's guidelines on complex interventions: Phase 1 of the HELPER – InterACT programme. Int J Nurs Stud 2012;49:398-406.
- 9. McGorry P. Is early intervention in the major psychiatric disorders justified? Yes . BMJ 2008;337:695.
- 10. Pelosi A. Is early intervention in the major psychiatric disorders justified? BMJ 2008;337:710
- Kelly M, O'Meara Howard A, Smith J. Early intervention in psychosis: a rural perspective. J Psychiatr Ment Health Nurs 2007;14:203-8.
- Harrison G, Hopper K, Craig T, Laska E, Siegel C, Wanderling J, et al. Recovery from psychotic illness: a 15- and 25-year international follow-up study. Br J Psychiatry 2001;178:506-17.
- 13. Birchwood M, McGorry P, Jackson H. Early intervention in schizophrenia. Br J Psychiatry 1997;170:2-5.
- Marshall M, Lewis S, Lockwood A, Drake R, Jones P, Croudace T. Association between duration of untreated psychosis and outcome in cohorts of first-episode patients: a systematic review. Arch Gen Psychiatry 2005;62:975-83.
- 15. Yap HL. Early psychosis intervention. Singapore Med J 2010;51;689-93.
- Guoest JF, Cookson RF. Cost of schizophrenia to UK Society: an incidence-based cost-of-illness model for the first 5 years following diagnosis. Pharmacoeconomics 1999;15:597-610.
- 17. Harker R. NHS funding and expenditure. London: NHS; 2012.
- Serretti A, Mandelli L, Bajo E, Cevenini N, Papili P, Mori E, et al. The socio-economical burden of schizophrenia: a simulation of cost-offset of early intervention program in Italy. Eur Psychiatry 2009;24:11-6.
- Singh SP, Burns T, Amin S, Jones PB, Harrison G. Acute and transient psychotic disorders: precursors, epidemiology, course and outcome. Br J Psychiatry 2004;185:452-59.
- Department of Health. The NHS Plan: a plan for investment, a plan for reform. London: Crown Copyright; 2000.
- Department of Health. National service framework for mental health: modern standards and service models. London: Crown Copyright; 1999.
- 22. Tiffin PA, Glover G. From commitment to reality: early intervention services in England. Early Interv Psychiatry

2007;1:104-7.

- 23. Birchwood M, Lester H. A national evaluation of early intervention services. UK: Department of Health Policy Research Programme grant; 2005.
- 24. Carr VJ. Time to move on? Commentary on the early intervention in psychosis debate. Aust N Z J Psychiatry 2012;46:384-5.
- 25. Amminger GP, Leicester S, Yung AR. Early-onset of symptoms predicts conversion to non-affective psychosis in ultra high-risk individuals. Schizophr Res 2006;84:67-76.
- 26. Florin D. Barriers to evidence based policy. BMJ 1996;313:894.
- World Health Organisation. mhGAP Intervention guide for mental, neurological and substance use disorders in non-specialized health settings. Geneva: WHO; 2010.
- 28. White R. The globalisation of mental illness. Psychologist 2013;26:182-5.
- 29. Rhodes RA, Marsh D. New directions in the study of policy networks. Eur J Polit Res 1992;21:181-205.