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The development of the Early Intervention in Psychosis (EIP) outpatient unit of Eginition University Hospital into an EIP Network

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Over the past 25 years, in the field of psychosis there is an increased interest in early detection of symptoms and treatment provision for people who are either at Ultra High Risk (UHR) of developing psychosis or with First Episode Psychosis (FEP). Extensive research has proved, that by engaging quickly into treatment and addressing the needs of each case individually, clinical outcomes could be improved substantially. The above evidence-based argument has resulted in the establishment of specialized Early Intervention in Psychosis (EIP) services worldwide. Eginition University Hospital (EUH) in Athens has been providing care for Early Psychosis through a specialized outpatient EIP service since 2012, which receives all early psychosis cases. Initially clinical focus was mainly directed towards UHR cases, since EUH had long been providing standard care for FEP. However, over the last 4 years, the EIP Unit has evolved incrementally into a network of directly linked services, involving the EIP outpatient service, an Inpatient Unit for prompt hospitalization and a Day Clinic for partial hospitalization, to address acute treatment, follow-up and recovery/relapse prevention phases. Diagnostic evaluation is made through specialized instruments along with the typical psychiatric interview. The therapeutic approach follows the international guidelines for EIP, namely symptom-based and phase-specific treatment, which includes supportive counselling, coping strategies and psychoeducation both for subjects and family members, as well as pharmacotherapy when needed and preferably in low doses. Regarding our results, in the first 3 years (3/2012–3/2015) the EIP unit received 26 (60%) UHR subjects and 17 (40%) FEP patients. Over the last 4 years (3/2015–3/2019) the referrals rose to 167 with 35 (21%) UHR and 132 (79%) FEP cases. All of the UHR subjects were from the outset followed by the specialized outpatient EIP service for up to 3 years. As to the FEP patients, seventy-seven (60%) were acutely hospitalized for less than a month, and 10 (8%) attended the Day Clinic for 6 – 12 months, before

being referred to the outpatient service. Concluding, the development of the EIP network of specialized services has cohesively enabled a broader therapeutic framework, shifting the clinical focus towards FEP, although UHR subjects are still being assessed systematically. However, there is still considerable work to be done, in order to enhance the full potential of all units and promote the interconnection with potential community settings.

Key words: Early intervention in psychosis, high risk, first episode psychosis, outpatient unit, network.

Introduction

For the last 25 years, the concept of Early Intervention in Psychosis (EIP) has been extensively recognized as a means of promoting improved care for people with newly presented psychotic features,¹⁻³ resulting in the worldwide establishment of specialized services.^{4,5} The rationale for early intervention is that there is a better outcome if psychotic symptoms are treated early, especially during the critical period of up to 5 years surrounding the first episode of psychosis (FEP),⁶ decreasing the potential psychopathological impact that can lead to psychological, social and biological disability.^{7,8}

EIP is highly dependent on the basis of combined effort between clinical infrastructures. The EIP services aim to provide timely recognition and treatment of subjects either at ultra-high risk (UHR) of developing psychosis or with newly developed psychosis. The task is even more challenging when the service boundaries are set to combine and respond to all the different needs of both UHR state and FEP.⁹

The Eginition EIP outpatient unit was established in 2012.¹⁰ At first clinical focus was mainly towards UHR cases, since Eginition University Hospital (EUH) had long been providing standard care for FEP. However, over the last 4 years, the unit has extended its networking in terms of therapeutic continuum to include direct collaboration with an Inpatient Unit for prompt hospitalization and a Day Clinic for partial hospitalization. We present the development of the EIP outpatient service into a network of services and its organizational framework.

EIP services

EUH receives patients on a daily basis, regardless of any catchment area limitation. All referrals to the EIP unit are addressed within three days from the first

contact. In addition, the unit has close links to 4 psychiatric departments of public hospitals (414 Military Hospital, Sismanoglio General Hospital, Attiko University Hospital and Sotiria General Hospital), regarding the referral of early psychosis cases. The inclusion criteria are as follows: 15–40 years of age, either with FEP within 5 years of presentation or with UHR falling into one of the three groups, namely Attenuated Positive Symptoms (APS) group, Brief Limited Intermittent Psychotic Symptoms (BLIPS) group and Trait risk group.¹¹ The exclusion criteria are alcohol or substance abuse, intellectual disability (IQ<70), and organic brain disorder.

The diagnostic procedure consists of the typical psychiatric evaluation assessing the pre-morbid and current mental state, personality traits, environmental and genetic risk factors and functional status. Our basic instruments are the Comprehensive Assessment of At-Risk Mental State (CAARMS),^{12,13} the Social and Occupational Functioning Assessment Scale (SOFAS),¹⁴ the Positive and Negative Symptom Scale (PANSS),^{15,16} the Nottingham Onset Schedule (NOS),¹⁷ and the Wechsler Adult Intelligence Scale-fourth edition (WAIS-IVGR).^{18,19} In addition, we perform hematological and imaging tests to exclude organicity.

The EIP unit is following the Early Psychosis Association goals outlined in the international clinical practice guidelines,²⁰ seeking to provide symptom-based approach and phase-specific treatment, along with psychotherapeutic coping strategies, psychoeducation, carers' support and administration of minimum effective dose of anti-psychotics when needed. Research has been integral to the network's development with an ongoing project regarding the gene – environment interaction in the clinical course of FEP. Research associates work across the EIP units to maintain continuity of care.

Outpatient unit

The EIP outpatient unit was set in 2012. At first, emphasis was given to UHR subjects, since there was no other service in Greece addressing these cases. An informative approach took place towards the different units of EUH, other psychiatric hospitals, as well as family organizations of psychotic patients. Gradually the interconnection regarding FEP inside EUH was enhanced, resulting in the increasing referrals of FEP cases and the creation of a system of directly linked services. The unit operates once per week managing both UHR and FEP cases and providing follow up for 3 years. It is linked with the inpatient unit and the day clinic, sharing the case-specific approach, and conducting joint assessments. Interventions include psychotherapy with cognitive behavioral techniques, family counselling and pharmacotherapy.

Inpatient unit

Since 2015 EUH ensures 2 inpatient-beds in one of the adult wards solely for the acute hospitalization of FEP. Due to the distinctiveness of admitting young patients to existing acute adult wards, priority was given to FEP cases and to those who relapse. The inpatient unit aims to provide a collaborative environment, with a weekday program of group therapeutic activities and low-dose medication. The time frame is 15–30 days. Every effort is made to manage acutely disturbed patients with close observation.

Day clinic

The day clinic of EUH has long been oriented towards intensive case management of psychotic patients with a range of psychosocial interventions focusing on recovery and relapse prevention, applied for 6–12 months. Since 2015, EIP service began to utilize its already established therapeutic framework. The hours of operation are weekdays, 8:00–15:00, with caseloads of up to 20 patients. The psychological treatment provided is primarily supportive counseling, monitoring of mental state and coping strategies based on group therapy. Specific interventions include occupational and drama therapy.

Output

The EIP outpatient unit has received in 7 years (March 2012–March 2019) 167 EP subjects, of which

35 were UHR and 132 had a FEP, with a mean duration of untreated psychosis 31 weeks (median 11 weeks). The inpatient Unit as part of the EIP has had 91 FEP admissions, all of which were afterwards referred to the outpatient unit. Concerning the day clinic, to date 10 FEP patients have attended and completed their therapeutic program.

The development of the EIP outpatient unit into a network of interconnected services has resulted in the broadening of the therapeutic scope to include different levels of care for EP. The supplementation of the outpatient monitoring, with the capability of acute hospitalization on an emergency basis, as well as partial hospitalization with intensive treatment on a daily basis, has shifted the focus towards FEP. Indicatively, in the first 3 years UHR outweighed FEP (60% versus 40%) in total 43 EP subjects.¹⁰ However, after the augmentation of the collaborative configuration and the promptness of the referrals between the interconnected units, the caseload of FEP rose to 132 (79%), while UHR subjects were 35 (21%) out of 167 EP cases. In regard to the clinical course and treatment characteristics, table 1 presents the basic parameters, namely UHR groups, rates of transition to psychosis of UHR subjects, treatment resistance^{21,22} and re-admission of FEP patients to the inpatient unit within at least 6 months of follow up.

Discussion

The EIP unit is one of the few 'standalone' early intervention settings in Greece providing mental health service requirements for young people experiencing EP. All services are an integral part of the First Department of Psychiatry of EUH in Athens and have close links to psychiatric services of other hospitals, providing primary and secondary prevention of psychosis in a complementary way.

The collaborative diversification of the EIP outpatient unit has designated the ability to combine pre-existing clinical resources into a system of EIP services, and hence enabling the expansion of treatment to meet the different needs of the early stages of psychosis. While at the beginning of the outpatient service emphasis was given to UHR cases, the integration of already established hospital units has reoriented the focus towards FEP.

Table 1. Service users (N=167) and outcomes.

	n (%)
Total HR subjects	35 (20.9% of all cases)
HR groups	
–APS	27 (77.1%)
–BLIPS	5 (14.3%)
–Trait Risk Group*	3 (8.6%)
Transition to psychosis	9 (25.7%)
Total FEP subjects	132 (79.1% of all cases)
Antipsychotic medication	
–Response to first line	129 (97.7%)
–Treatment resistant**	3 (2.3%)
Follow-up	
–Outpatient	122 (92.4%)
–Re-admission to inpatient unit	10 (7.6%)

*Trait Risk Group refers to HR subjects with vulnerability due to first degree family history of psychosis or schizotypal personality disorder along with functional deficits.

**The treatment resistant cases (moderate severity & <20% reduction in PANSS) after 6-week trials with 2 different antipsychotics, achieved remission with clozapine.

APS: Attenuated Psychotic Symptoms, BLIP: Brief Limited Intermittent Psychotic Symptoms, FEP: First Episode Psychosis, HR: High Risk, PANSS: Positive And Negative Symptom Scale

The challenge ahead is in renewing the sensitization of referrers towards subclinical psychotic experiences along with full-blown psychosis. Enhancement of early detection strategies and awareness campaigns are needed, along with collaboration with adolescent services and support agencies. In addition, the international EIP treatment outlines highlight the importance of addressing the indices of patients' quality of life, when considering the therapeutic efficacy. These include not only reduction of the psychopathological features which is reflected in remission rates, but also patients' recovery in terms of social, vocational and academic functional capacity.²³ Thus, the diversity and complexity of Early Psychosis call for a broader engagement with community-based services, that will address the different clinical and psychosocial needs through a compound therapeutic model.²⁴ The steady development of the EIP outpatient unit of EUH aims to address these challenges. However, there is still considerable work to be done, in order to enable all units to reach their full potential and promote the interconnection with potential community settings.

Η εξέλιξη του εξωτερικού ιατρείου Πρώιμης Παρέμβασης στην Ψύχωση (ΠΠΨ) του Αιγινήτειου Νοσοκομείου σε Δίκτυο Υπηρεσιών ΠΠΨ

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Τα τελευταία 25 χρόνια, στο πεδίο της ψύχωσης έχει αναπτυχθεί αυξημένο ενδιαφέρον για την έγκαιρη ανίχνευση συμπτωμάτων και παροχή θεραπείας σε ανθρώπους που παρουσιάζουν είτε Λίαν Υψηλό Κίνδυνο (ΛΥΚ) για εκδήλωση ψύχωσης, είτε Πρώτο Ψυχωσικό Επεισόδιο (ΠΨΕ). Εκτεταμένες μελέτες ψυχωσιόμορφων ή ψυχωσικών συμπτωμάτων πρόσφατης έναρξης απέδειξαν, ότι με τη γρήγορη εμπλοκή σε θεραπεία και την εξατομικευμένη αντιμετώπιση των αναγκών, τα κλινικά αποτελέσματα θα μπορούσαν να βελτιωθούν σημαντικά. Τα παραπάνω ερευνητικά δεδομένα είχαν ως

αποτέλεσμα τη δημιουργία εξειδικευμένων υπηρεσιών Πρώιμης Παρέμβασης στην Ψύχωση (ΠΠΨ) σε όλο τον κόσμο. Από το 2012, στο Αιγινήτειο Πανεπιστημιακό Νοσοκομείο στην Αθήνα λειτουργεί Εξωτερικό Ιατρείο ΠΠΨ, που παρέχει εξειδικευμένη φροντίδα σε άτομα με Πρώιμη Ψύχωση. Αρχικά το κλινικό ενδιαφέρον εστιάστηκε κυρίως στις περιπτώσεις ΛΥΚ, καθώς το Αιγινήτειο Νοσοκομείο παρέχει διαχρονικά τις τυπικές ψυχιατρικές υπηρεσίες αντιμετώπισης ΠΨΕ. Ωστόσο, τα τελευταία 4 χρόνια, η Μονάδα ΠΠΨ έχει εξελιχθεί σταδιακά σε ένα δίκτυο υπηρεσιών εντός του Αιγινήτειου Νοσοκομείου, που αφορά πέρα από το Εξωτερικό Ιατρείο ΠΠΨ, σε μια ενδονοσοκομειακή μονάδα για την άμεση νοσηλεία περιστατικών ΠΨΕ που βρίσκονται σε οξεία φάση και σε μια μονάδα μερικής νοσηλείας (Νοσοκομείο Ημέρας), για τη φάση αποκατάστασης και πρόληψης υποτροπών. Η διαγνωστική αξιολόγηση γίνεται μέσω εξειδικευμένων εργαλείων μαζί με την τυπική ψυχιατρική συνέντευξη. Η θεραπευτική προσέγγιση ακολουθεί τις διεθνείς κατευθυντήριες γραμμές της ΠΠΨ, δηλαδή την εξειδικευμένη για κάθε κλινική περίπτωση και φάση της νόσου θεραπεία, η οποία περιλαμβάνει αφενός υποστηρικτική συμβουλευτική ψυχοθεραπεία, στρατηγικές αντιμετώπισης των συμπτωμάτων βασισμένες στη γνωσιακή-συμπεριφορική προσέγγιση και ψυχοεκπαίδευση, αφετέρου φαρμακοθεραπεία όταν χρειάζεται και κατά προτίμηση σε χαμηλές δόσεις. Αναφορικά με τα αποτελέσματα, στα πρώτα 3 έτη (3/2012–3/2015) η μονάδα ΠΠΨ έλαβε 26 (60%) περιπτώσεις ΛΥΚ και 17 (40%) ασθενείς με ΠΨΕ. Κατά τη διάρκεια των τελευταίων 4 ετών (3/2015–3/2019) οι παραπομπές αυξήθηκαν σε 167 με 35 (21%) ΛΥΚ και 132 (79%) ΠΨΕ. Όσον αφορά στους ασθενείς με ΠΨΕ, εβδομήντα επτά (60%) νοσηλεύτηκαν στο νοσοκομείο για λιγότερο από έναν μήνα, και 10 (8%) παρακολούθησαν το Νοσοκομείο Ημέρας για 6–12 μήνες, πριν παραπεμφθούν στο Εξωτερικό Ιατρείο ΠΠΨ. Καταλήγοντας, η ανάπτυξη του δικτύου εξειδικευμένων υπηρεσιών ΠΠΨ έχει συνεκτικά ενεργοποιήσει ένα ευρύτερο θεραπευτικό πλαίσιο, μετατοπίζοντας το κλινικό ενδιαφέρον προς τα ΠΨΕ, παρόλο που τα περιστατικά ΛΥΚ εξακολουθούν να αξιολογούνται και να αντιμετωπίζονται συστηματικά. Ωστόσο, χρειάζεται να ενισχυθεί το πλήρες δυναμικό των μονάδων και να προωθηθεί η διασύνδεση με κοινοτικές μονάδες ΠΠΨ.

Λέξεις ευρετηρίου: Πρώιμη παρέμβαση στην ψύχωση, λίαν υψηλού κινδύνου, πρώτο ψυχωσικό επεισόδιο, δίκτυο υπηρεσιών.

References

1. McGorry PD. The concept of recovery and secondary prevention in psychotic disorders. *Aust N Z J Psychiatry* 1992, 25:43–55, doi: 10.3109/00048679209068305
2. McGlashan TH, Johannessen JO. Early detection and intervention with schizophrenia: Rationale. *Schizophr Bull* 1996, 22:201–222, doi: 10.1093/schbul/22.2.201
3. Fusar-Poli P, McGorry PD, Kane JM. Improving outcomes of first-episode psychosis: an overview. *World Psychiatry* 2017, 16:251–265, doi: 10.1002/wps.20446
4. McGorry P, Killackey E, Yung A. Early intervention in psychotic disorders detection and treatment of the first episode and the critical early stages. *Med J Aust* 2007, 187:8–10, PMID: 17908033
5. Birchwood M. Early intervention in psychosis services: The next generation. *Early Interv Psychiatry* 2014, 8:1–2, doi: 10.1111/eip.12124
6. Birchwood M, Todd P, Jackson C. Early intervention in psychosis. The critical period hypothesis. *Br J Psychiatry* 1998, 172:53–59, PMID: 9764127
7. Pantelis C, Yucel M, Wood SJ. Early and late neurodevelopmental disturbances in schizophrenia and their functional consequences. *Aust N Z J Psychiatry* 2003, 37:399–406, doi: 10.1046/j.1440-1614.2003.01193.x
8. 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, 62:975–983, doi: 10.1001/archpsyc.62.9.975
9. Power P, McGuire P, Iacaponi E, Garety P, Morris E, Valmaggia L et al. Lambeth Early Onset (LEO) and Outreach & Support in South London (OASIS) service. *Early Interv Psychiatry* 2007, 1:97–103, doi: 10.1111/j.1751-7893.2007.00010.x
10. Kollias C, Xenaki LA, Dimitrakopoulos S, Kosteletos I, Kontaxakis V, Stefanis N et al. Early psychosis intervention outpatient service of the 1st Psychiatric University Clinic in Athens: 3 Years of experience. *Early Interv Psychiatry* 2018, 12:491–496, doi: 10.1111/eip.12407
11. Phillips LJ, Yung AR, McGorry PD. Identification of young people at risk of psychosis: validation of Personal Assessment and Crisis Evaluation Clinic intake criteria. *Aust N Z J Psychiatry* 2000, 34:164–169, doi: 10.1080/000486700239
12. Yung AR, Yuen HP, McGorry PD, Phillips LJ, Kelly D, Dell'Olio M et al. Mapping the onset of psychosis: the comprehensive assessment of at-risk mental states. *Aust N Z J Psychiatry* 2005, 39:964–971, doi: 10.1080/j.1440-1614.2005.01714.x
13. Kollias C, Kontaxakis V, Havaki-Kontaxaki B, Simmons MB, Stefanis N, Papageorgiou C. Inter-rater reliability of the Greek

- translation of the CAARMS among two groups of mental health professionals, psychiatry residents and specialized. *Psychiatriki* 2015, 26:217–222, PMID: 26480226
14. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 4th ed. American Psychiatric Association, Washington, DC, 2000
 15. Kay SR, Fiszbein A, Opler LA. The positive and negative syndrome scale (PANSS) for schizophrenia. *Schizophr Bull* 1987, 13:261–276, doi: 10.1093/schbul/13.2.261
 16. Lykouras E, Botsis A, Oulis P. *The Positive and Negative Syndrome Scale (PANSS)* [in Greek]. Tsiveriotis Ed, Athens, Greece, 1994
 17. Sing SP, Cooper JE, Fisher HL, Tarrant CJ, Lloyd T, Banjo J et al. Determining the chronology and components of psychosis onset: The Nottingham Onset Schedule (NOS). *Schizophr Res* 2004, 80:117–130, doi: 10.1016/j.schres.2005.04.018
 18. Stogiannidou, A. *WAIS-IV GR (Wechsler Adult Intelligence Scale)* 4th ed. Motivo Publications, Athens, 2011
 19. Wechsler D. *Wechsler adult intelligence scale*. 4th ed. San Antonio, TX: Pearson, 2008
 20. International Early Psychosis Association Writing Group. International clinical practice guidelines for early psychosis. *Br J Psychiatry* 2005, 187:120–124, doi: 10.1192/bjp.187.48.s120
 21. Howes OD, McCutcheon R, Agid O, de Bartolomeis A, van Beveren NJM, Birnbaum ML et al. Treatment-Resistant Schizophrenia: Treatment Response and Resistance in Psychosis (TRRIP) Working Group Consensus Guidelines on Diagnosis and Terminology. *Am J Psychiatry* 2017, 174:3, doi: 10.1176/appi.ajp.2016.16050503
 22. van Os J, Burns T, Cavallaro R, Leucht J, Peuskens J, Helldin L et al. Standardized remission criteria in schizophrenia. *Acta Psychiatr Scand* 2006, 113:91–95, doi: 10.1111/j.1600-0447.2005.00659.x
 23. McGorry PD, Mei C. Early intervention in youth mental health: progress and future directions. *Evid Based Ment Health* 2018, 21:182–184, doi: 10.1136/ebmental-2018-300060
 24. Stefanis NC, Mavreas V, Nimatoudis I, Gourzis F, Sarakouri M, Vgontzas A et al; EIP Working group. A proposal for the implementation of Early Intervention in Psychosis (EIP) services in Greece: If not now, when? *Psychiatriki* 2018, 29:107–117, doi: 10.22365/jpsych.2018.292.107
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