European Status and Perspectives on Early Detection and Intervention in at Risk Mental State and First Episode Psychosis: Viewpoint from the EPA Section for Prevention of Mental Disorders

N. P. Maric 1, A. Raballo 2, M. Rojnic Kuzman 3, S. Andric Petrovic 4 J. Klosterkötter 5 A. Riecher-Rössler 6

1. School of Medicine, University of Belgrade & Clinic for Psychiatry, Clinical Centre of Serbia, Belgrade, Serbia
2. Norwegian University of Science and Technology (NTNU), Developmental Psychopathology Research Group, Trondheim, Norway
3. Zagreb School of Medicine, Zagreb University Hospital Centre, Zagreb, Croatia
4. Clinic for Psychiatry- Clinical Centre of Serbia- Belgrade, Belgrade, Serbia
5. University of Cologne, Department of Psychiatry and Psychotherapy, Cologne, Germany
6. Center for Gender Research and Early Detection, University of Basel Psychiatric Hospital, Basel, Switzerland

There is no doubt that it is useful and necessary to offer timely and adequate treatment to young individuals at early stages of psychotic disorders, which are in many countries still accompanied with long duration of untreated illness (several months or years), high levels of anxiety/depression/substance use, serious complications and with a poor prognosis. While early intervention in psychosis approach originated in Australia, it was first adopted by two European countries, Germany and the United Kingdom [1,2]. Since then, early detection and intervention services have been established in other European countries too, however, there are still marked differences in service availability and structure. As pointed out in a recent review by Mc Daid et al. [3],the status of early detection and intervention services in Europe is ranging from well-established networks in the United Kingdom, Germany, Norway, Denmark, Italy, availability in most Swiss cantons and potential to scale up in several other countries (Spain, Ireland), while almost no services were identified in the new Member States of the EU and lower-income European countries [3].

Aiming to fill in the knowledge gap regarding the progress of ED/EI implementation in member countries of the European Psychiatric Association (EPA), between August 2016 and February 2017 we conducted the survey to explore distribution of early detection/early intervention (ED/EI) services in all countries whose National Psychiatric Associations (NPA) are members of the EPA. The survey was conducted on behalf of the EPA and its section 'Prevention of Mental Disorders', with the help of EPA administration. At the time of this evaluation, EPA included National Psychiatric Associations representing 37 countries. Most of them (28 in total) were countries with developed economies, while the other 9 were classified as developing countries [4].

For the purpose of this evaluation and on the basis of literature, we defined ED/EI services as specialized care pathways addressing early detection (ED) and/or early intervention (EI). Timely identification of first episode psychosis (FEP) and/or at-risk mental states (ARMS) via specific instruments and methods, basically managed by trained personnel (e.g. psychiatrists or psychologists), was considered as ED. EI was defined by offering specific intensive treatments that aim at reducing the duration of untreated psychosis (DUP) and/or the severity of first episode psychosis and improving recovery.

We asked all presidents of the national psychiatric associations (NPA) of all the 37 countries via E-Mail to fill in a questionnaire addressing the developmental status of ED/EI services in their countries. In addition, we asked if there was information about ED/EI in the relevant national guidelines for schizophrenia and local policy towards the implementation of ED/EI in national mental health system and whether there was a section for prevention within the country's NPA. The respondents were asked to refer to the relevant published data wherever applicable. The Presidents were also asked to recommend a person for additional information about the ED/EI services/programs in their country. For countries which did not reply (15 out of 37), we performed a PUBMED search (including the terms: name of the country, "psychosis", "early intervention", "early detection", etc.) and contacted colleagues. We also sent them the questionnaire via e-mail and asked them to complete it to the best of their knowledge. Thus, we collected the replies from seven more countries. Our final sample consisted of 29 countries of those 37 with NPA EPA membership.

The replies have shown that 18 out of 29 countries had ED/EI programs/services implemented at the time of this evaluation (Figure 1). Countries which reported ED/EI programs/services were

(alphabetically): Austria (EU), Belarus (non-EU), Croatia (EU), Denmark (EU), Finland (EU), France (EU), Georgia (non-EU), Germany (EU), Greece (EU), Iceland (non-EU), Norway (non-EU), Poland (EU), Russia (non-EU), Serbia (non-EU), Spain (EU), Switzerland (non-EU), United Kingdom (EU) and Ukraine (non-EU).

- Insert **Figure 1** around here -

At the time of this evaluation, most of the countries with ED/EI services had 1 to 5 sites. The approximate number of ED/EI services was 1-2 in 38.9%, 3-5 in 33.3% and ≥6 in 27.8% countries. The countries with a greater number of services were: the United Kingdom, Norway, Poland, Spain and Russia.

On average, 2 to 20 years have elapsed since the implementation of the first ED/EI services. The first European ED/EI services have been established mostly (but not exclusively) in countries with a developed economy. According to the survey replies, the countries with the longest service duration (≥15 years since the first service implementation) were the United Kingdom, Germany, Switzerland, Russia and Spain.

The target population covered by the ED/EI services in 2/3 countries included both FEP and ARMS. We noticed that countries with older services were also more likely to include ARMS. Moreover, ED/EI services have been addressing both adolescent and adult help-seekers in ¾ of the cases. They were not separated into early detection *vs*. early intervention services/programs, i.e. they have been working together in all countries.

National guidelines for schizophrenia interventions were reported by 23 out of 29 countries, while less than a half of them (14 countries) included specific chapters focusing on early detection or early intervention in psychosis and/or ARMS. We found no relation between having an ED/EI chapter in the national guidelines and time elapsed since the first service

implementation.

The question regarding national plans to develop programs for ED/EI of psychoses was answered positively by 6 countries, while 18 answered negatively and 5 answers were missing. The countries with a national plan also tended to have the ED/EI chapters in their national schizophrenia guidelines.

A national section on early detection/intervention or prevention was reported by only 4 out of 29 NPAs involved in the present study. In comparison to the other countries, those who had their own early prevention section also had earlier established ED/EI services.

We believe that the results of the present survey are adding new information to the field. Our current ability to recognize several risk groups at an early stage od psychosis does not only provide an opportunity, but also implies an educational/clinical imperative to act [5]. The understanding of the developmental trajectories of non-affective and affective psychotic disorders, basic knowledge on environmental circumstances and neurobiological factors that can positively or negatively affect the developmental trajectories, has increased in the last two decades.

This knowledge needs to be integrated and updated in national schizophrenia guidelines (and other relevant resources) in order to spread information and facilitate interventions in early stages of emerging psychosis. We noticed that more than half of the countries do not include specific chapters on ED/EI related topics in the national guidelines. Such a situation needs to be improved by responsible authorities and the whole psychiatric community. In 2015, two EPA guideline papers were published, with a detailed and contemporary description of early detection and intervention tools [6, 7]. The translation of the information into different languages, as it was

already done in Poland and Croatia (personal communication), is a good example that could be followed by the rest of the EPA-NPAs. We also have to improve specialized pre- and post-graduate education in this domain, in parallel with efforts to spread information into the community.

The fact that a national plan to develop ED/EI services/programs was found in a minority of European countries represents important information for policy makers and a starting point for mental health program revisions.

Launching prevention sections within all national psychiatric associations could be one of the prospects towards improvement of early detection/intervention in emerging psychosis. Although this survey has shown that such sections within the psychiatric associations are rather an exception than a rule.

The actual survey needs to be considered as a baseline evaluation of European ED/EI service distribution, national health policies and ED/EI focused educational resources. For the next level of evaluation, it would be important to elucidate the resources of ED/EI service funding, their key components and key staff, the range of activities they offer (e.g. cognitive remediation therapy, life/social skills training, family support, online digital support, etc.), in order to make in-depth analyses about diversities and similarities within and between countries.

Nevertheless, the EPA could use the presented baseline results as a starting point to plan how to implement ED/EI services through its NPAs, improve their utility, advocate for their harmonization across Europe, and provide multi-level educational tools (e.g. for psychiatrists and other mental health staff) that could accelerate the implementation of timely detection and intervention in emerging psychosis. We are convinced that the time has come to focus on early

detection and intervention in psychiatry, i.e. on promotion of the secondary prevention of psychoses [8, 9]

Conflicts of interest: none.

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Acknowledgement: Authors would like to thank the EPA administrative staff for disseminating the survey and patiently collecting the replies.

References

1. McGorry PD, Killackey E, Yung A. Early intervention in psychosis: concepts, evidence and future directions. World Psychiatry 2008; 7(3): 148–56.

2. Fusar-Poli P, Borgwardt S, Bechdolf A, Addington J, Riecher-Rössler A, Shultze-Luter F et al. The psychosis high risk state: a comprehensive state-of-the-art review. JAMA Psychiatry 2013; 70(1): 107-20. https://doi.org/10.1001/jamapsychiatry.2013.269.

3. McDaid D, Park AL, Lemmi V, Adelaja B, Knapp M. Growth in the use of early intervention for psychoses services: An opportunity to promote recovery amid concerns on health care sustainability. London, UK: Personal Social Services Research Unit; 2016.

4. UN World Economic Situation and Prospects, http://www.un.org/en/development/desa/policy/wesp/wesp_current/2016wesp_ch1_en.pdf, 2016 [accessed 13.05.17].

5. Sommer IE, Bearden CE, van Dellen E, Breetvelt EJ, DuijffSN, Maijer K et al. Early interventions in risk groups for schizophrenia: what are we waiting for? NPJ Schizophr 2016; 2: 16003. https://doi.org/10.1038/npjschz.2016.3.

6. Schmidt SJ, Schultze-Lutter F, Schimmelmann BG, Maric NP, Salokangas RK, Riecher-Rössler A, et al. EPA guidance on the early intervention in clinical high risk states of psychoses. Eur Psychiatry 2015; 30(3): 388-404. https://doi.org/10.1016/j.eurpsy.2015.01.013.

7. Schultze-Lutter F, Michel C, Schmidt SJ, Schimmelmann BG, Maric NP, Salokangas RK, et al. EPA guidance on the early detection of clinical high risk states of psychoses. Eur Psychiatry 2015; 30(3): 405-16. https://doi.org/10.1016/j.eurpsy.2015.01.010.

8. Jorm AF, Patten SB, Brugha TS, Mojtabai R. Has increased provision of treatment reduced the

prevalence of common mental disorders? Review of the evidence from four countries. World Psychiatry 2017; 16(1): 90–9. https://doi.org/10.1002/wps.20388.

9. Riecher-Rössler A, Studerus E. High time for a paradigm shift in psychiatry. World Psychiatry 2016; 15(2): 131-3. https://doi.org/10.1002/wps.20329.