

A global perspective on training and education in child and adolescent psychiatry

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SUMMARY

This chapter takes a global look at training in child and adolescent psychiatry (CAP). We provide an overview of the history and current state of CAP training internationally including common models for training that have been developed, noting their similarities and differences. Then, to illustrate the differences in CAP practice and training related to local, societal and cultural differences, a number of personal experiences of CAP training in various countries are presented and a qualitative content analysis of these is provided. Stories were contributed by trainees and trainers based on the questions: What is most culturally and locally specific about CAP training programs in your country? What are the major challenges and inspirational solutions? The development of a child and adolescent psychiatrist does not finish at the end of their training. Life-long models of learning are considered through the lenses of personal development, continuing medical education and development of resilience; an introduction to educational theory supporting these, is provided. Next, the chapter offers a possible roadmap to increase the available evidence for CAP training and implement evidence-based best practices that will allow us to guide investments in training towards a stronger profession and improved child and adolescent mental health for our patients globally. At the end of the chapter, we provide a summary of available materials and resources from international trainees, trainers and training related organization that can be used by those seeking to start or enrich local training programs.

GENERAL INTRODUCTION

It is stated that 10,000 hours is the time it takes for an average human being to become expert at a certain skill. This seems to apply to arts, sports, and most professional activities including becoming a CAP. This Chapter offers a perspective on how our trainees in CAP in different parts of the world spend their first 10,000 hours. It offers an over-view of differences and similarities in CAP training and provides links to practical resources. It attempts to describe how CAP trainees and trainers apply knowledge and theory of how adults learn and the importance of resilience and wellbeing to guide our trainees through personal and professional development. The aim is to help them become good enough to respond to the mental health needs of children and young people into the future.

Our aim was not to be comprehensive, rather to provide an anthology and hopefully inspiration. All sections were co-composed by a group of experienced trainers in close cooperation with trainees. We have tried to shed light on the similarities and differences, local and cultural, in CAP training hoping that international comparison will inspire and encourage further exchange of ideas. The chapter begins to describe similarities and differences with respect to local history, culture, economic circumstances and organization of mental health care.

Despite, and maybe because of this wide variety, we argue for greater international collaboration in CAP training initiatives, recognizing it will help us better face future challenges in our profession. As has happened in medical research in the past decades, those aiming to increase their effectiveness in training

can be more efficient when they cooperate, share materials and insights on what and how we teach. As child and adolescent psychiatrists, we are already skilled and experienced in taking a life-long developmental perspective, in putting ourselves in the shoes of people with a different background, in cooperating with complex systems and in balancing autonomy and guidance. Our hope is for the development of a trusting, well-functioning collaborative international network around CAP training, a task that may take more than 10,000 hours! We hope this chapter inspires you to join us in such an emerging global learning community of practice for CAP training.

As an author group, we invite you to share comments or suggestions of changes and additional topics after reading and we are open to any help offered for future revisions of this Chapter.

SECTION A: HISTORY, COMMON GROUND AND DIVERSITY

Origin of training in CAP

The origin of Child Psychiatry, and training in the discipline, is a very recent development in the history of mental health as a medical concern (Rey et al., 2015). The first known child psychiatry clinic was established at the Heidelberg University Clinic in Germany by August Homberger in 1876 (Jacobs et al., 2018). Quite how knowledge was passed to doctors learning about child and adolescent mental health between then and the first textbooks in German (Homberger, 1926; Strohmeyer, 1923), and then in English (Kanner, 1935), is unclear.

National and international training organizations emerge

Professional national organizations aiming to improve and stimulate clinical care, research and training and education in CAP were, for a brief period, embedded in general psychiatry as a whole and then for child and adolescent psychiatry as a separate discipline. Contact between child psychiatrists within Europe, suggesting an international organization and cooperation, can be traced to 1935 and in 1937, when IACAPAP began as The International Committee for Child Psychiatry (Schleimer, 2012). In the USA, in 1953, The American Academy of Child and Adolescent Psychiatry (AACAP) was founded, followed by national organizations in some European countries and Australia. A crude indicator of the spread of the profession in the past 50 years can be gained by looking at the countries in which the biennial IACAPAP conference has taken place. For many years it occurred in Europe, USA and Canada, Israel and Australia. In 1990 it took place in Japan (Kyoto), New Delhi 2002, Turkey (Istanbul) 2008 and China (Beijing) 2010, South Africa (Durban) 2014 and Singapore in 2020.

Some characteristics of current state of CAP training around the world

The differentiation and organization of CAP and the specialist training associated with it in different countries across the globe varies quite significantly.

In many countries it is a separate specialty from the other psychiatry professions. In some places, this leads to a completely separated training, sometimes with little overlap or requirement to spend time in adult psychiatry. Elsewhere, there is a limited, defined placement expected in adult psychiatry whilst in other countries very significant time is devoted to adult psychiatry training before specializing in Child and Adolescent Psychiatry. In some places the specialist training is largely in areas of adult psychiatry with little time spent becoming a CAP specialist. This counters consensus views in several continents that specialist training in CAP itself takes a minimum of two to three years to achieve (Hunt et al., 2020; Royal Australian and New Zealand College of Psychiatry, 2015; UEMS-CAP & Jacobs, 2014). In some countries training experience in pediatrics and/ or neurology is a requirement. Some parts of the world still rely on informal training in CAP with practitioners following their interest after training formally in adult psychiatry. These differences reflect the various histories of CAP in different parts of the world, the level of child and adolescent mental health (CAMH) service development in countries and the number of CAPs for the population.

Historically, organization of CAP training in each region of the world seems to have developed largely by a process of importing models of training into these countries and communities by influential senior clinicians and educators from the institution and countries in which they, themselves, were trained. Some examples of how this model leads to difference in training can be seen in Europe, where the organization of training in France has historically been rather dependent on a psychoanalytic model of practice across all of childhood versus in Finland, where adolescent psychiatry is a separate specialty from child psychiatry. Interestingly, many countries separated by language and culture seem to have co-evolved similar models, for example in the UK and Sweden where the curriculums were surprisingly similar in recent years. There are other examples where there has probably been a convergent evolution of training curriculums, even if the models of service delivery are different; the USA, UK and Australia/New Zealand offer examples. In Asia, child psychiatry was recognized as a specialty in 12 of 17 Far East nations by 2014 (Lim et al., 2015) but there was a paucity of official guidelines for training (Hirota et al., 2014). In Singapore an apprenticeship model based on the historical UK system became much more structured in 2010 (Lim et al., 2015). Indonesia had CAP specialists trained abroad at the University of Honolulu in Hawaii during the late 1960's and early 1970s. On the basis of this, they adapted that program for local conditions in 1976 with a 2 year fellowship program (Wiguna et al., 2016). In Pakistan, a two year fellowship program has been developed in collaboration between Pakistan and Yale University (Azeem et al., 2015). In Egypt, a MSc program in Psychiatry of Children & Adolescence was established in 2009 (Kasralainy Faculty of Medicine, Cairo University). In the Arab world a unified training program has been offered since 2009). In the Arab world a unified training program is offered (Arab Board, 2016). In China, there are a number of university-based trainings (He et al., 2020) but as yet, there is no national over-view of training. Very recently, a collaborative program has been developed between Shenzhen and Harvard, USA which is now expanding to become a possible model for a national training program in China (Belfer et al., 2021). In South America (personal communication) there are some university programs (e.g. at Salvador University in Argentina) but as yet, no national training programs in CAP.

Countries with a more recent tradition of child and adolescent mental health and child and adolescent psychiatry are adopting different models to train the child and adolescent psychiatrists of the future, possibly due to being unburdened with the history of a particular training methodology. There is a complex relationship between the recognition of need for specialists and the existing provision that affects the shape and capacity to train (Sourander et al., 2018). Some have largely adopted a corpus of knowledge and processes that are then adapted to the practice environment in their countries, e.g. Japan where there was an initiative to link to the Institute of Psychiatry, Psychology and Neuroscience, King's College in London to provide training seminars over several years (personal communication). Training in Japan remains a challenge (Tateno et al., 2017). In many countries where there has been an insufficient body of specialists, doctors who want to train as child psychiatrists have travelled and trained abroad. For example, many from South American countries have looked to universities in the USA. Malaysia and more recently Sri Lanka CAP have migrated to Australia for such training. There has been some cross-fertilization of training within Europe. For example, the Alicia Koplowitz Foundation Fellowship scheme (Alicia Koplowitz Foundation) has enabled trainees from Spain to train abroad in the absence of a recognized specialty of CAP in their country. Other examples of such fertilization are seen at a trainee level with the efforts of the European Federation of Psychiatric Trainees to facilitate short-term experience for trainees in different European countries (European Federation of Psychiatric Trainees, 2021).

Best-practices and quality assurance systems

Given the variety in training and education practices the question arises as to what and how works best for whom and where. There is little research on these issues for CAP. There is some descriptive research of patterns of training and the degree to which training in different countries meets criteria set out in parts of the world. For example, in Europe, there have been several such studies, some led by senior child and adolescent psychiatrists (Barrett et al., 2020; Karabekiroglu et al., 2006) and others by trainees (Simmons et al., 2012). Perhaps unsurprisingly, they do not always agree about what constitutes good training. There is also an Europe-wide model of what should constitute a national training system to attempt to ensure quality, resources and probity of training (UEMS-CAP & Jacobs, 2014). A special edition of the European Journal of Child and Adolescent Psychiatry (January 2020) included editorials and papers describing current systems of training across the continents of the world (Deschamps et al., 2020; Deschamps & Jacobs, 2020; Dingle & Kolli, 2020; Gregoric Kumperscak et al., 2020; Hunt et al., 2020; Kommu et al., 2020; Rao et al., 2020; Scivoletto et al., 2020). There is also research that is relevant in terms of the ways in which adults learn.

Systems of auditing the quality of training also show great variation across medical training worldwide. Some progress has been made with countries across Europe coming together to develop common curriculums in different branches of medicine (UEMS, 2015) including Child and Adolescent Psychiatry (UEMS-CAP & Jacobs 2014; UEMS-CAP, Deschamps & Thorsten). Potentially, this model offers opportunities for international benchmarking within a specialty as well as comparisons of approach between specialties.

A potential way to move forward in improving CAP training programs is to integrate what is known from medical education more broadly (see later in this chapter). This has incorporated models and the evidence base drawn from what is known about adult learning.

In summary, there is still a long way to go to develop high quality CAP training worldwide. Whether the same goals of training and curriculum topics are appropriate for radically different societies with very varied cultures, local contexts and needs, remains largely unexplored so far.

SECTION B: PERSONAL EXPERIENCES OF TRAINEES AND TRAINERS

Introduction

To start illustrating the rich differences in CAP practice and training related to local, societal and cultural differences, this section presents brief vignettes of CAP training. It is based on an online survey, sent out by the authors of this Chapter, inviting connections in their networks to send contributions outlining what they found most culturally and locally specific about CAP training programs in their respective region. We asked for contributions describing two different levels of subjective experience and perspective: those of the trainee and the trainer. The main question was to provide experience and perspective in answer to some open-ended probe-questions (see Table 1).

Table 1. Prompt questions for vignettes

- What is it like to be a trainee/trainer in your country?
- What do you enjoy and appreciate most?
- What are the challenges and things you would like to change?
- Are there features to your training that you think are specific to the context you are in (cultural, geographical, resource specific, etc.)?

Twenty-six vignettes were received: thirteen from trainees and thirteen from trainers. Countries of participants are reported in Table 2.

Table 2. Participants' countries of origin		
Country	Trainees	Trainers
Canada		1
Colombia	1	
Denmark	2	2
Egypt	2	2
Estonia	1	
France	1	
Greece		1
Indonesia	1	1
Kingdom of Bahrain	1	
Spain	1	
The Netherlands	2	3
UK	1	2
USA		1
Total	13	13

To help interpret the input provided by trainees, we used a qualitative approach by thematic analysis (Braun & Clarke, 2006). Our aim was to perform an initial exploration. It is not a complete description, in terms of number of countries and continents surveyed. We could not claim to have reached data saturation but sufficiency, that is, we had enough data to provide a first in-depth understanding of phenomena of interest. Table 3 and Table 4 summarize themes and sub-themes including quotations based on the responses provided by trainees and trainers.

Trainees' perspective

Trainees emphasized three main themes: psychological security of educational framework, local and culturally specific issues, and the specific detailed skills in CAP training compared with other medical specialties.

Trainee Theme 1: Psychological security of educational framework

Several factors supporting or limiting psychological security of trainees arose as an important theme of influence for CAP training. First, a certain degree of agreement and structure of curriculum appeared as a strong scaffolding factor that allowed a safe involvement in training while its absence aroused feelings of being overwhelmed and exhaustion in trainees that inhibited learning. Second, a benevolent and less hierarchical attitude of trainers was seen as a strong factor supporting the ability to learn from mistakes and allow for a personal transformation from trainee to medical specialist. Some trainee participants highlighted the subtlety of an appropriate mentorship, suggesting tailoring this to the trainees' needs and progression. Third, support embedded in positive learning relationship with their trainee peers was mentioned. Together, trainees and trainers need to assure appropriate, available and timely support in critical situations as well as help with personal reflection.

Fourth, the issue of certification and formative assessment was mentioned, although only by very few trainees, suggesting this issue was less prominent and important in trainees' minds during higher training. One trainee regretted the absence of certification goals and requirements in their country. It left unrecognized the high level of motivation and skills necessary to work with children and adolescents. Another criticized the many issues that needed justification in the certification process and found this created feelings of 'infantilization'. At the same time, this participant recognized the sense and necessity of some kind of summative assessment and examination. The issue was also raised of a relative surfeit of training positions are sometimes on offer compared to the number of candidates that are particularly qualified; this lack of applicants could influence the appraisal processes and overall quality of training.

Finally, a good work-life balance was also mentioned as an important condition for learning during training as well as the degree to which the educational framework helped trainees deal with socioeconomical and political issues in their respective context.

Trainee Theme 2: Local and culturally specific issues

Issues and challenges related to their local context also emerged. The Egyptian trainee pointed to the current lack of health workers that are well-trained in mental health in their country. The role of religion limiting care access was stressed by the Bahraini trainee. In the UK, a trainee mentioned a complex transition process between being a trainee and becoming a medical specialist. In Spain, CAP has only very recently been recognized as a separate specialty. There are still aspects to the structure and content of training that are residues of trying to achieve relevant knowledge and skills for trainees in a system not well adapted to deliver this. In Colombia, a trainee described the gap between evidence-based practices that were mentioned during training and the current situation and availability of resources limiting their ability to apply them in healthcare.

Trainee Theme 3: Specificity of CAP training compared with other medical specialties

Beyond traditional challenges associated with all higher training - a broad clinical experience incorporating a wide range of pathological presentations and care conditions - specific interview, counselling and self-regulation skills were stressed by trainees as essential and specific to CAP as was the need to support them within a strong and regular supervision framework.

One participant described how the specific interview skills required to build a therapeutic alliance with children and adolescents were rather new and how a long prior medical training failed to inform or build a foundation; some aspects of interviewing patients previously learned were unhelpful in CAP and needed to be changed. The ability to contain a wide range of emotions was pointed as a fundamental skill while psychotherapy training was recognized as essential by most trainee participants in countries where this has already been implemented as well as in countries in which this was not yet developed. In-depth, regular supervision was expected and stressed as essential by almost all trainee participants.

Table 2: Trainee themes and sub-themes

Themes	Sub-themes	Examples of quotations
Psychological security of educational framework	Curriculum: level of agreement and structure	ID ¹ Tre: <i>"Being a trainee in my country is exciting because the place where I am studying has a structured educational curriculum."</i>
	Attitude of trainer: benevolent and 'horizontal'	NL ² Tre 1: <i>"What I appreciate most is the safe training climate (...). There is an open atmosphere, in which contact with supervisor/trainer is easily accessible."</i>
	Support: availability from trainers and peers when needed	EE ³ Tre: <i>"Having someone to ask whenever necessary."</i> DK ⁴ Tre: <i>"When we are on call there is often a feeling of being very much alone (...)."</i>
		UK ⁵ Tre: <i>"The right balance between self-direction and always having senior consultant support."</i>
	Certification and summative assessment	UK Tre: <i>"There seem to be bureaucratic processes that might make trainees seem 'infantilised' - yet on reflection, there needs to be a system of assessment - both summative and formative."</i> DK Tre 1 <i>"...minority of poorly qualified and motivated candidates compared to other specialties"</i>

	Work-life balance	<p>NL Tre 1: "Attention is also paid to work-life balance."</p> <p>EG⁶ Tre: "It was a burden on my social and familial life."</p>
	Lack of scaffolding to deal with economical and political issues	<p>EG Tre: "High rate of patients relative to staff represents a difficulty."</p> <p>DK Tre: "There tends to be a focus on production from our directors."</p>
Issues related to local context		<p>BH⁷ Tre: "to change is the stigma associated with seeking professional help for mental health difficulties, rather than relying on religious healers, which is a common approach by many"</p> <p>EG Tre: "in a far area due to lack of training centers nearby my home and general (...), it's exhausting (...) and it adds more physical load and time consumption to my journey".</p>
Specificity of CAP training versus other specialties	Specific interview skills	<p>NL Tre 2: "strange position of being experienced and inexperienced at the same time. (...), I had to examine a 7-year-old boy in a playroom, I did not have a clue how to approach this. (...)"</p> <p>"... training is a strange and invaluable time ... not only about 'learning' in the strict sense but about growth as well. In one case I learned ... when you're short on time, there's little to win by hurrying, there is lots to win by being more selective."</p>
	Ability to contain a wide range of emotions	<p>UK Tre: "[that we could learn that we could] play a role in 'containing' anxiety and managing highly anxiety provoking situations (...)."</p> <p>UK Tre: "Out-of-hours on-call - ... covering very big areas in a big urban context were difficult -... It also taught me a lot - how to prioritize, (...) evaluating complex information quickly (...), consult with colleagues and seniors in a timely manner, (...) 'containing' anxiety, and managing highly anxiety provoking situations (...) creating 'good enough' collaboration with patients and families (...)"</p>
	Importance of in-depth and regular supervision	<p>EE Tre: "There could be more (and better) supervising, guidance."</p> <p>EG Tre: "I would like to have more time to discuss the cases with my supervisors".</p>

¹ID: Indonesia ²NL: The Nederland ³EE: Estonia ⁴DK: Denmark ⁵UK: United Kingdom

⁶EG: Egypt ⁷BH: Bahrain

Trainers' perspective

Four main themes emerged from the trainers' narratives: key strengths of training aligned with trainees' view; support and training for supervisors; an overall view making sense in CAP training framework; and variation and combination of epistemic positions to understand CAP trainees' pathway.

Trainer Theme 1: Key strengths of training aligned with trainees' view

Trainers were all very satisfied with their role as trainer. Almost all essential themes and concerns raised by trainees for their training were mentioned as prevalent challenges by trainers.

Trainer Theme 2: Support, training and a dedicated community of supervisors

One trainer participant focused on the help that may be needed to help develop supervisory skills that are needed to fulfil the role of "trainer"; that is, an ability to provide appropriate training support through experiential training of trainees. The possession of a high level of clinical skills and abilities were considered as insufficient. A dedicated learning community of supervisors was mentioned to support each other, to reflect together and improve supervision and training. A parallel was drawn with the role of healthy team support for involvement in daily clinical practice.

Trainer Theme 3: An overall view making sense in CAP training framework

As expected and consistent with their positions, most training organizers presented a well-summarized overall perspective of CAP trainee pathway in their respective countries. They highlighted that making sense of CAP training can only be done when taking an overall view including the organization of mental health and public health issues. They provided examples of how resolving these issues would influence CAP training and education.

This supports the idea that core aspects of CAP training should include the specific professional knowledge, skills, and attitudes that CAPs need to perform at the end of their training; that this also requires a broad perspective to ensure that CAP professionals adapt to evolving societal needs. A historical perspective was also mentioned including changes in CAP training implementation. CAP training is young; it has been developing between 0 to no more than 50 years for the countries of our survey participants. This encouraged dynamic criticism, pointing out gaps and differing evolution alongside complex transformations of countries' socioeconomic contexts and suggesting future improvements.

Trainer Theme 4: Variation and combination of epistemic positions to understand CAP trainees' pathway

Different approaches emerged throughout the several views of organizers of training participants, to understand CAP trainees' pathway and experience. This may be situated between two poles of a continuum. On the one side, CAP training

is perceived as having external validity with good and representative indicators to support the development of appropriate analytical criteria. On the other side, CAP training is seen through the lens of helping trainees develop a mindset or gestalt of a holistic, integrated approach to a discourse with their patients and the parents that supports their shifting away from a narrow pathological way of presenting and towards health. This can significantly influence the way training organizers design their recruitment and their relationship with trainees.

Table 3: Trainee themes and sub-themes

Themes	Sub-themes	Examples of quotations
Key strengths aligned with trainees' view	Importance of psychological security of educational framework	NL Tra II: "As an organizer of the training I try to optimize this process [of safe training], to generate qualified professionals with self-esteem."
	Well-adjusted trainer' support tailored to the trainees' needs	NL Tra II: <i>"It is a balance between compassion with the trainees and consideration of their boundaries, and on the other hand encouragement to go beyond their limits and drawing lines to keep them up to the demands of the traineeship."</i>
	Importance of work-life balance	NL Tra II: <i>"Having their own children and the interaction with them often amplify the struggle of their own emotional processes and a new adequate work-life balance has to be found."</i>
	Impact of heavy contextual framework on training	EG Tra: <i>"Some of the challenges we face [for CAP training] are the limited number of the trained psychologist and social workers, the unsatisfactory quality of the delivered services due to workload and limited some services such as school-based interventions, difficult families, shortage of medications and proper documentation especially digital system."</i>
	Key role of supervision	GR Tra: <i>"It is not a matter of teaching technical skills but a true interaction that helps the therapeutic relationship between the trainee and the patient (through supervision...)"</i>
	Specificity of CAP training regarding other medical specialties	NL Tra II: <i>"The medical training they already received, gave them the medical view, decisiveness and responsibility they need in this profession. This traineeship amplifies these abilities; however, it adds psychotherapeutic skills and to sometimes lean back to stimulate growth and responsibility by the patients."</i>
	Ability to contain a wide range of emotions	NL Tra II: <i>"They need to develop self-awareness of their own psychological processes, in order to be able to use their emotions and emotional stability to let their patients grow."</i>
	Importance of psychotherapy training	NL Tra II: <i>"The interaction with patients and their family systems, stresses the own emotional stability, and the transference and counter-transference feelings can raise high"</i>
Support and training for supervisors	Training of supervising's skills	NL Tra I: <i>"Fortunately, we do have an internal supervisor training to work on your supervisor skills."</i>

GR: Greece

	Affiliation to a community of supervisors	NL Tra 1: <i>"[Despite the high] workload with patients, I believe that we have a strong association of psychiatry with a strong subsection CAP"</i>
An overall view making sense in CAP training framework	A well-summarized overall perspective	UK Org 1: <i>"Though it usually takes 6 years if a trainee is training full time (3 years for training in Core Psychiatry and then 3 years of specialist CAP training after securing the MRCPsych (Membership of the Royal College of Psychiatrists) exam)."</i>
	A systemic approach	ID Org: <i>"The long way but it is totally valuable. Indonesia is a huge country with more than 250 million population, and 40% of its population consist of children and adolescents. By 2045, more than 70% of our total population will be in the productive age (15-64 years old)."</i>
	A direction anchored in "Entrustable Professional Activities" adjusted with societal needs	ID Org: <i>"They need to be trained not only as a CAP clinician (...), but also being an advocator that advocate the stake holder, case manager and collaborator with other mental health professionals to provide a better CA mental health systems."</i>
	A reference to history basing distance and trails for improvements	DK Org 1: <i>"Training in CAP has (...) been starved (...) as a consequence of increasing referral numbers and political demands of short waiting times without adding resources. (...) 5-10 years ago, trainees were to a much higher extend trained in CAP by being paired with more experiences staff."</i>
Variation of epistemic positions to understand CAP trainees' pathway	Perceptions through external and analytical criteria	UK Org: <i>"This has been especially popular with 100% recruitment into the pilot (providing the certainty of training throughout in one geographical training scheme). We have also noted a significant national improvement in recruitment in higher training in CAP since the pilot started ."</i>
	Perceptions through holistic and subjective criteria	NL Org: <i>"Tomorrow I have an appointment with one of my trainees. I know what she is going to ask me: whether she may postpone her scientific case report for the next week. She was having a patient in crisis and a sick child at home, so had no time to prepare this teaching moment. This question indicates the multiple tasks a CAP trainee must fulfil."</i>
	Influence on recruitment and position toward CAP trainees	NL Org: <i>"We are looking for candidates able to connect emotionally with other people, who can reflect on their own emotions, who are able to work in stressful situations and to collaborate with a wide range of professionals."</i>

Conclusions

Despite its exploratory nature, the results from this collection of vignettes and analysis of them using a qualitative approach triggers reflections about CAP training in each context while raising opportunities to inform international best-practices in this area. Among other efforts, this could help building future cornerstones to reduce inequalities while respecting each cultural context. We hope this section will also inspire further qualitative exploration about the relationship and the perceptions of CAP trainers and trainees. It might also include the views of their patients and carers about CAP training and services.

Based on our experience, such an effort would seem feasible using online questionnaires, but it should allow for enough time and rigor to obtain data saturation, apply some degree of interactivity and sending back results to at least a sub-sample of participants to get their feedback and ensure the results align with their view.

These first results stress the importance of adjusted, enhanced and consistent supervision being available for trainees. It also suggests the benefit of focused supervision skills training and a supervisor community supporting continuing professional development as a trainer. Reflection on the epistemological models that underly trainers' perception of trainees' training could ultimately enhance and diversify the quality of support provided to trainees.

Section C: Continuous development, wellbeing and resiliency

The development of medical professionals does not end with completion of training. Increasing attention is given to continuous medical education and lifelong learning models based on educational theory. In this continuous professional development, post-graduate training takes an important role, but modesty and sustainability require those concerned with CAP training and education to start thinking about and integrating lifelong development attitudes and skills early on during training and even in medical school. It includes the related aspect of resilience and personal wellbeing. The latter is crucial for CAP training as our core activities include working with vulnerable patients at different stages of development. We also need to safeguard and respect our patients' increasing autonomy as we aim to help them to develop into mature adults who will flourish or at least manage despite the difficulties that have brought them to our attention. For a broader overview of wellbeing and resilience in CAP professionals we refer to Chapter J.12 on this topic "Wellbeing: identification and prevention of burn-out, depression and suicide among child mental health clinicians".

Lifelong learning in CAP: continuous medical education

There is an ongoing effort to improve quality of care through increased physician accountability, improved patient safety, and greater consistency in the delivery of care. Nevertheless, substantial inconsistencies in the delivery of evidenced based health care exist worldwide (Deschamps & Jacobs, 2020; Institute

of Medicine (US) Committee on Quality of Health Care in America, 2000). Ensuring and improving physicians' lifelong learning is considered an important part of the response to these challenges and should already be considered during training. However, it remains a challenge to best design and implement continuing education for physicians so that we positively affect the health of our patients and the public.

Historically, physicians typically choose passive types of CME along with topics that appeal to them, not necessarily topics where they have a gap in their knowledge (Bower et al., 2008). Studies have demonstrated little relationship between self and external assessments (Davis et al., 2006). A more concerning finding is that the largest inaccuracy in self-assessment occurs most prominently among the demonstrably least skilled, yet most confident, physicians (Davis et al., 2006). A systematic review by the Cochrane Collaboration concluded that workshops using interactive formats lead to moderately large changes in physician practice (Thomson O'Brien et al., 2001). Training programs need to anticipate this pattern.

The following 5 steps have been identified as key to help trainees become successful self-directed adult learners (Moore Donald, 2008) - 1) recognizing an opportunity for learning; 2) searching for the resources for learning; 3) engaging in learning to address an opportunity for improvement; 4) trying out what was learned in practice; and 5) incorporating what was learned in new situations.

Adult learning theory as guidance

Life-long learning of child and adolescent psychiatrists can be situated in the field of "adult learning theory" in line with the descriptions of Knowles & al. (2005) on how adult can best learn and focus on their attitude toward learning (Knowles et al., 2014). Adult learning has features different from the ways children learn (Taylor & Hamdy, 2013):

- (1) The need to know (Why do I need to know this?)
- (2) The learners' self-concept (I am responsible for my own decisions)
- (3) The role of the learners' experiences (I have experiences which I value, and you should respect)
- (4) Readiness to learn (I need to learn because my circumstances are changing)
- (5) Orientation to learning (Learning will help me deal with the situation in which I find myself)
- (6) Motivation (I learn because I want to)

This approach to adult learning emerged in the context of wide social, psychological, educational and philosophical development during the twentieth century: from behaviorism and cognitivism to the essential role of "communities of practice in guiding and encouraging the learner" (Taylor & Hamdy, 2013; Wenger, 1998). In particular, self-determination theory highlighted the essential role of "intrinsic motivation" for learning, sustained by three basic needs: autonomy, competence and feeling of belonging (Ryan & Deci, 2000). Moreover, the aim

is to train “reflexive practitioners” (Schon, 1984); that is, training practitioners able to ensure continuing reflection in action. By this we mean an encounter with something new, such as a patient or a lecture, which triggers comparison between what the learner already knows and that which is different; this allows new concept creation to bridge the gap, and which will subsequently be tested in ongoing practice. As well as reflecting on action, the learner reflects on the appropriateness and rigor of their learning process.

Related to CAP training, the above raises the question as to how trainers should create conditions to support learners develop a reflective stance as well as sustain trainees’ intrinsic motivation to promote lifelong learning (Ausubel et al., 1968). The concept of ‘scaffolding’ has developed; that is, structural things that trainers do to guide learners through the “sheer volume and complexity of knowledge to be acquired (which) often leaves the learner standing on the threshold (in a state of liminality), rather than stepping into the world of learning” (Taylor & Hamdy, 2013).

The shift in medical education from a ‘teaching paradigm’ to a ‘learning paradigm’ has implications for both training processes and assessment (Huba & Freed, 2000; Jouquan et al., 2013) and offers a way of thinking well suited to CAP. Trainer-trainee relationships become less hierarchical and knowledge is co-constructed. Trainers adopt a position of ‘facilitator’ tailored to the trainee’s current level and needs, to support their reflectivity and learning, while providing a role model. Assessment is better incorporated in the training instead of heavily, separated summative, standardized tests.

Traditional medical curriculum structures were based on a ‘time-based model’, implying a fixed time needed to be spent in training. Yet, contemporary shifts promoted a ‘competency-based model’, focused on acquisition of identified competencies through entrustable professional activities (Park et al., 2016). From this perspective we can see lifelong learning aligns better with this contemporary competency-based model. It better ensures that professionals are able to adapt to complex and rapidly changing systems across their careers, through continuous cycles of learning. For a competency-based model to work well it is important that the learner moves from a “can show” to a “does” practice (Miller, 1990), in a considered manner mode of action i.e. that they have not only learned a skill but also learned when and how to apply it and its limitations. In doing this, they are developing a reflective, iterative learning style, that they can apply across future learning during their career.

Let us look at these developments using the US CAP training framework as an exemplar. The skills and attitudes for the development of lifelong learning in US CAP training are described in the Accreditation Council of Graduate Medical Education (ACGME) subsumed under the Practice-based Learning and Improvement competency: “Residents and fellows must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning.”. The aim of the competency is to help residents and fellows develop the habits necessary required to continuously pursue quality improvement, well past the completion of fellowship (ACGME, 2020a).

The key aspects of this core competency are consistent across specialties; though programs may differ in how they present the knowledge and which skills they choose to focus on when training physicians (<https://knowledgeplus.nejm.org/blog/practice-based-learning-and-improvement/>). The first step requires demonstration of an ability to investigate and evaluate a patient by gathering and analyzing patient information. This includes firstly identifying the limits of their knowledge and skill in the understanding and treatment of a patient and through self-reflection and then, perhaps with a trainer, identify their educational need to move beyond those limits to greater knowledge and skill. Next the trainees must be able to access and review scientific information, identify its relevance and apply this information to their patient's needs. The third and final element for the core competency is for trainees to demonstrate skills in and a commitment to improving their practice of child and adolescent psychiatry. By employing quality improvement methods to systematically evaluate their own practice, child and adolescent psychiatrists can ensure continuous improvement of their practice. CAP trainees must be open to constructive feedback from teachers, their patients, as well as other members of the health care team that allows for the incorporation of outside information into their daily medical practice to enhance the quality of patient care.

Once qualified, a continuing ability and willingness to learn reflectively from their patients, their colleagues and from the literature are core components of lifelong-learning.

Wellbeing and resilience

Physicians and other allied health professionals are experiencing very high rates of burnout. According to many sources 21-67% of mental health workers in Europe and the US, spanning multiple disciplines—nurses, occupational therapists, social workers, psychologists, and psychiatrists—have been reported to have high levels of burnout (Javier et al., 2019). Nearly 40% of practicing psychiatrists as well as 45-60% of medical students and residents have experienced substantial symptoms of burnout (American Psychiatric Association). Burnout is described as having a high degree of emotional fatigue, including irritability and cynicism, and a low sense of professional engagement (Maslach & Leiter, 2016; Morse et al., 2012; Rotenstein et al., 2018; Shanafelt et al., 2012). The impact of burnout and the possible strategies to mitigate are highlighted in the Javier et al., 2019 IACAPAP e-textbook (Javier et al., 2019).

The Accreditation Council for Graduate Medical Education (ACGME) in the United States has begun to address burnout and wellbeing within all training programs. This accreditation body has added an entire section (Section VI.C) of its Common Program Requirements for all residency and fellowship programs regardless of specialty, to address well-being more directly and comprehensively (ACGME, 2020b). The requirements emphasize that psychological, emotional, and physical well-being are critical in the development of the competent, caring, and resilient physician. These specific requirements emphasize the importance of institutional oversight of duty hours, fatigue management, and well-being. The training programs are required to develop systems that encourage residents, fellows and faculty members to report their concerns when they or their colleagues displays

signs of depression, burnout, substance use disorder, and/or suicidal ideation conditions, so that the program director or other designated personnel, such as the department chair, may assess the situation and intervene as necessary to facilitate access to appropriate care. The ACGME monitors these requirements through annual resident and faculty surveys and emphasizes the important role of faculty modeling in implementing systems that support physician well-being. In addition to monitoring well-being programs also must teach components of self-care and emphasize that these skills can be learned and nurtured throughout training.

Recent studies have described attempts by residency programs to implement well-being initiatives. These have included well-being groups, exercise classes, classes related to mental health and sleep, teaching meditation skills, cognitive behavior therapy, and positive perspective taking and others (Benson et al., 2018; Chaukos et al., 2018; Guille et al., 2015; Runyan et al., 2016). Busireddy and colleagues (2017) systematically reviewed and analyzed 19 studies enrolling 2030 residents and found that one intervention, limiting resident hours, was consistently found to reduce burnout (Busireddy et al., 2017). All of the other interventions were limited by small sample size of enrolled residents and that they described interventions from a single residency program. Javier and colleagues (2019) describe interventions with some level of success in non-resident groups including physicians and allied health professionals from international settings (Javier et al., 2019). There is no doubt that further research is needed to assess efforts to improve residents' wellbeing including strategies to improve resilience and effectively identify and mitigate burnout. Support from national and international residency oversight organizations should be increased to ensure the implementation of evidenced based strategies.

Section D: An exploratory roadmap to evidence based best-practices in training and educational research

Introduction: relevance of research on teaching and education

Best practices in medical education help us train and educate medical professionals in the most effective and efficient way to deliver the outcome of good doctors providing high quality care. To support innovation in learning and training in CAP, research into the education of CAPs is needed. As a result, training can be based on what approach works for whom and under what circumstances. This can ensure evidence-informed decision-making in policy, planning and educational practice that promotes CAP's learning and practice.

So far, educational research in CAP is modest, apart from small-scale initiatives and several surveys that are largely descriptive. The questions for this section are: What type of educational research is desirable, on what issues and themes, and what are the next steps to develop an educational research framework for CAP training? The breath of the matter makes it hard to decide where to start building a framework. First, we need to recognize that the training and education process of a CAP takes years and consists of multiple elements. In terms of study designs and drawing a parallel to medical intervention research, the preferred approach would be comparison studies comparing different approaches through

long-term follow-up. Secondly, the outcome measures for a successfully trained CAP require a clear definition of what is a good doctor and CAP. It needs to recognize that good CAP practice is based on complex interpersonal skills amongst other competencies. Third, in terms of generalizability of findings, CAP training occurs in a wide variety of practice contexts and cultural circumstances: what works best in one context may be less effective in another part of the world. Lastly, how CAP provide care of their patients is confounded by factors other than training practices, such as talent, life experience and service systems they work in to name some.

Despite these challenges, here we offer a suggestion for a CAP training and education research framework. In establishing such a framework, we argue experience and knowledge drawn from the established research fields of adult education and medical education literature is needed, that but is yet to be substantially brought to the training of CAP.

Bringing focus: potential topics for future research

Educational research can be classified at different levels (De Corte, 2000) that describe how individual trainees learn best, how formal and informal contexts of work and education influence learning, how local and (inter)national organizations can assist in setting curricula and how we can develop an educational and health care system that assures patient, carer and trainee involvement in an iterative process of feedback and improvement. All these perspectives ultimately contribute to lifelong learning and development of CAP professionals and ensuring they deliver the best care for their patients. Using these different viewpoints a CAP training research framework would include:

1. Learning processes in the individual trainee

Starting at the level of an individual trainee, it is helpful to understand the learning processes in his/her mind using learning-centred adult education concepts (Tennant, 2019).

Topics include e.g.:

- self-regulatory skills;
- resilience and the effects of personal well-being on learning;
- trainees' metacognition to improve their learning strategies;
- scaffoldings provided by trainers to promote trainee metacognition and learning;
- the development of an inquiring-oriented attitude that enables continuous professional development.

2. The learning context and work environment

Both the learning and clinical work environment in which CAP training occurs can be studied.

Topics may include e.g.:

- interprofessional learning, with multi- and interdisciplinary learning environments teams (Tielemans et al., 2021);
- learning from and with patients and their carers, based on the ‘nothing about me without me’ principle that applies from bedside and classrooms training to patient and career participation in curriculum development and educational research;
- impact of digitalization, including attitude and behavior with technology in patients, carers and professional lives, digital communication with patients, carers and colleagues as well as technologies to enable training (e.g., gamification, simulation training, e-consultation education, virtual reality (L. Wissow et al., 2011; L. S. Wissow et al., 2008);
- communities of practice that offer an effective and sustainable approach for co-creating, sharing and implementing best practices (Wenger, 1998).

3. The curriculum

Study of local and (inter) national comparisons exploring similarities and differences in curriculum content, including knowledge, skills and attitudes that equip future CAP to reflect on their practice and theoretical frameworks and continually adjust to evolving patients, community and societal needs.

Topics include e.g.:

- flexible, modular teaching and learning programs in formal teaching and practical learning in clinical work environments (Zitter et al., 2016);
- translational medicine on how to translate CAP innovations in clinical practice into training;
- the need for curriculums to support lifelong learning development including how CAP create their own future learning pathways;
- teaching staff development including understanding how supervisors and teachers develop educational competencies and are trained.

4. The organization of an educational and health care system

This level covers how to organize and create health care systems and organizations where training and clinical practice takes place that allows an open and safe learning culture that is inclusive and supports diversity.

Topics include e.g.:

- the ‘hidden’ curriculum (implicitly taught norms) including how to shape a learning system that resonates with the values of patients and their carers (Beckett & Hager, 2002; Hager & Halliday, 2007);
- supporting organizational and cultural change to allow supervisors and teachers to provide training well;
- ensuring inclusiveness and diversity in training that promotes belonging

and prevents exclusion of patients, carers, trainees and staff members. This involves selection and examining policies, measures, programs and training approaches.

Facilitating evidence informed best practice in training and educational research in CAP

In the broader scope and perspective, it is obvious that international collaboration can help to create and strengthen communities of practices to support CAP education research and its implementation. In medical science we have seen that international organization and collaboration has improved research about patient care. As this Chapter demonstrates, along with stronger organization at national and regional levels, we see a rise of international collaboration around CAP training. Given current technological developments that facilitate communication and collaboration, we argue that the time is right to build international communities of practice to research and facilitate the implementation of best practices in the training of CAP.

Going forward a facilitating role will be played by blended learning (Müller & Mildenerger, 2021). Blended learning is traditionally defined as a combination of face-to-face learning and online learning. Today, blended learning also describes a combination of campus education and e-learning. In addition to this ‘blend’ there is a second ‘blend’ that has to do with a combination of learning in an educational setting and learning in the workplace. Combining both descriptions we see it is possible to ‘work’ in an education setting in an electronically simulated workplace. This is called double blended learning (Van Merriënboer & Kirschner, 2017), reflecting a combination of online and face-to-face training both at school and in the workplace. The digital component of such blended learning approaches holds the promise of efficient data collection for greater support of educational research than ever before.

As educational research in CAP develops and matures, it may include large-scale quantitative studies, both cross sectional and longitudinal studies; and intervention studies comparing the impact of new innovative education strategies to usual practice. By bringing the concept of “proof” from EBM (Evidence-based Medicine) to medical education, the development of EBE (Evidence-Based education) constitutes huge progress in the field of medical education (Knut Aspegren, 1999) and great promise to CAP education in particular. Some authors in educational research today assume the need to combine several epistemologies – and methodological tools to try to grasp the complexity of teaching and education phenomena (Pelaccia, 2013). The concept of EBE and proof is based on a ‘positivist’ approach that implies there is one ‘real truth’ or ‘reality’ that can be understood by breaking down complex matters into simple components. The field of health professions education can also be understood from a view of ‘constructivism’ where reality can be subjective and experienced and constructed differently by individuals (Nestel & Bearman, 2015). This allows us to recognize and appreciate the different views of students, trainers, patients, carers, health practitioners, faculty members, service administrators, funders, politicians, and ultimately, society. Accordingly, qualitative research methods could provide important insight within a comprehensive perspective and complementing quantitative methods in future

studies (Malterud, 2001; Mays & Pope, 2000).

The next steps are in the hands of the many and various stakeholders. Academic positions and career pathways allowing CAPs to develop as researchers and clinical educators with a background in educational research are needed to facilitate such a vision. On a smaller scale, practice-oriented research can flourish from partnerships between academia and workplaces with the right support. Structural inclusion of educational research in medical research funding rounds will be helpful. The value of education research as part of the academic medical culture will be stimulated by the development of traineeships, lectureships, teaching scholarship and clinician educators having protected time for research in education.

Conclusion

It is obvious that increasing available evidence for teaching and education in CAP will be a long-term investment. Historically CAP training has evolved from a small-scale master-apprentice model to currently a more professional and internationally benchmarked educational system. Explicit integration of results emerging from educational research into the training and education of CAP can start a cycle that integrates educational best practices and research into the backbone of CAP as a scientific endeavor. Finally, there will be a cascade of benefits for clinical care as patients, carers and health care providers work together in a continuous cycle of learning in their quest to improve child and adolescent mental health.

Section E: Resources and Networks

Introduction

Training in child and adolescent psychiatry, as in other medical specialist training programs, has evolved from a master-apprentice model to a professional training. Multiple international organizations were founded over the years with the aim to improve training and teaching in CAP, sometimes combined with other goals including research academies, medical associations defending the rights of doctors as well as advocacy from patient perspective. These international organizations have already started to explore the wide variation and similarities by exchanging national and international training curriculum frameworks, teaching content and methodologies.

In this section we provide information about a wide selection of such international associations and networks, as well as links to their websites. Firstly, are featured organizations that focus on trainees and early-career psychiatrists. We encourage readers to find more information and updates about them on the originating websites.

European Federation of Psychiatric Trainees (EFPT)

<https://efpt.eu/>

EFPT was established in 1993 and constitutes an umbrella organization of psychiatry trainees' associations across Europe. It counts on a Child and Adolescent Psychiatry (CAP) Working Group and a CAP Secretary on its Executive Board. In terms of CAP, EFPT represents the interests of existing national CAP trainees' associations, hosts research and advocacy activities regarding CAP training in Europe, holds an annual CAP symposium during the EFPT's Annual Meeting, and has an Exchange Program which includes some CAP placements in different hospitals and cities of the continent. EFPT also works closely with the European Union of Medical Specialties (UEMS), and EFPT's CAP Secretary meets annually with UEMS' Section of Child and Adolescent Psychiatry to discuss the state of CAP training across Europe (Gnanavel et al., 2020; Simmons et al., 2012). EFPT's CAP Secretary & Working Group Chair can be contacted at capsecretary@efpt.eu.

World Network of Psychiatric Trainees (WNPT)

<http://worldtrainees.org>

WNPT, established in 2018, is a global web-based network connecting individual training psychiatrists across the world, with a majority of members based in low- and middle-income countries. WNPT's membership comprises trainees from different psychiatric specialties, with around 10% being CAP trainees. WNPT constitutes a source of professional networking, research, and advocacy, and organizes periodic virtual fora with contents relevant to psychiatric trainees (Pereira-Sanches & Virani, 2021).

World Psychiatric Association and its Early Career Psychiatrists' Section (WPA-ECPS)

<https://www.wpanet.org/early-career-psychiatrists>

WPA is an umbrella organization for national psychiatric associations across the world. Its ECPS was established in 2015 to represent the interests of the youngest members of the profession worldwide, namely psychiatric trainees and graduated psychiatrists with up to 7 years of practice. This Section has recently (2021) opened a world exchange program (<https://worldpsychiatryexchangeprogram.wordpress.com/>), some of which placements are related to CAP (Pinto da Costa, 2020).

European Union Association of Medical Specialists, Child and Adolescent Psychiatry Section (UEMS-CAP)

<http://www.uemscap.eu>

UEMS is an umbrella organization for European national associations of medical specialists and provides international representation and collaboration among medical specialists and harmonization of quality training programs across countries. Its CAP Section, working closely with trainees through EFPT, works towards the establishment of a European Union Curriculum Framework for CAP

training, the organization of educational events for trainees, trainers and training program directors, harmonization of national evaluation of training outcomes through standard examinations, standardizing training in transition services from CAP to adult psychiatry healthcare across CAP and general adult psychiatry training programs and the integration of quality psychotherapy training in CAP programs and advocacy in child and adolescent mental health, and holds the aim of building an international network of CAP education(Deschamps et al., 2020, 2021).

European Society for Child and Adolescent Psychiatry (ESCAP)

<https://www.escap.eu/>

ESCAP aims to promote the mental health and wellbeing of children, adolescents and their families in Europe through fostering knowledge and skills in child psychiatry, international collaboration in CAP across the continent and research and education in the area. It comprises three divisions: academic, clinical and policy. The role of the academic division is to act as a forum for exchange of scientific research and to promote education and training, especially in research, in the field of child and adolescent psychiatry and mental health.

ESCAP provides educational opportunities for trainees and early-career child and adolescent psychiatrists, being the organizer of annual Research Academies and Residential Courses on Assessment and Treatment of Psychiatric Disorders in Children and Adolescents(Barrett et al., 2020).

European College of Neuropsychopharmacology (ECNP)

<https://www.ecnp.eu/>

ECNP is an association promoting research and collaboration in clinical neuroscience. It offers research skills training and mentorship for early-career professionals, and organizes the annual ECNP School of Child and Adolescent Neuropsychopharmacology.

International Association of Child and Adolescent Psychiatrists and Allied Professions (IACAPAP)

<https://iacapap.org/>

IACAPAP is a worldwide professional association for specialists in the area of child and adolescent psychiatry and mental health. Its work includes international collaboration, educational activities through conferences, massively online open courses and opportunities for early-career professionals, advocacy activities and publications. Notably, IACAPAP is the publisher of the live global, open-access manual of CAP this chapter is a part of.

In the area of CAP education for early-career professionals, IACAPAP offers the Donald Cohen Fellowship to foster professional development through mentorship and international collaboration and the Helmut Remschmidt Research Seminars to promote research skills. The establishment of an early-career group within IACAPAP is underway.

Other associations and networks

The organizations featured above in more detail were selected based on their notable availability of information about its role in CAP education and the specific opportunities for CAP trainees and early-career psychiatrists they offer. Notably, they have a European or global extent, and there is still less information or opportunities regarding CAP training in vast areas of the world. We recommend readers to consult the websites of psychiatric associations in other areas of the world for updates regarding CAP training: the Royal Australian & New Zealand College of Psychiatrists (<https://www.ranzcp.org/>), the Latin American Psychiatric Association (<https://www.webapal.org/>), the Pacific Rim College of Psychiatrists (<https://www.prcp.org/>), the Asian Federation of Psychiatric Associations (www.afpa.asia/en/), the African Association of Child and Adolescent Mental Health (<https://aacamh.org/>) and others.

Readers are encouraged to find further information about local and national associations and networks related to CAP (including national psychiatric associations, national CAP associations, and national psychiatric trainees' associations) in their respective websites. Due to its size and international impact, we will only be providing here more information about the American Academy of Child and Adolescent Psychiatry (AACAP) and its Medical Students and Residents Committee (AACAP-MSR) [<https://www.aacap.org>]. AACAP is the largest professional association for CAP specialists in the United States. Its mission is to promote the healthy development of children, adolescents, and families through advocacy, education, and research, and to meet the professional needs of child and adolescent psychiatrists throughout their careers. The AACAP website contains resources for members, families, practice parameters, mental health advocates and a special section for students, residents and early career psychiatrists. AACAP hosts a Medical Students and Residents Committee (AACAP-MSR) [https://www.aacap.org/AACAP/Medical_Students_and_Residents/Home.aspx?hkey=2d57e659-d566-4d70-9f68-bf8f58ff3245]. This committee, which is connected to AACAP's Training and Education Committee, brings to AACAP's leadership the voices of trainee members, and harnesses AACAP's resources to support medical students, psychiatry residents, and CAP fellows in and from the United States in their clinical, research, and advocacy work in child and adolescent mental health. AACAP-MSR includes regular open meetings, sponsorship of trainee-focused activities during AACAP's annual meeting, a periodic newsletter and a peer-mentorship program. Additionally, AACAP offers several opportunities for trainees, including annual research colloquia for early-career investigators, awards and training and research fellowships.

REFERENCES

- ACGME. (2020a). ACGME-approved focused revision-June 13, 2020; effective July 1, 2020.
- ACGME. (2020b). ACGME Common Program Requirements (Fellowship). <https://www.acgme.org/globalassets/PFAAssets/ProgramRequirements/CPRFellowship2021.pdf>
- Alicia Koplowitz Foundation. (n.d.). Fundacion Alicia Koplowitz. <https://fundacionaliaciakoplowitz.org/en/the-foundation/>
- American Psychiatric Association. (n.d.). Well-being Resources. Retrieved March 29, 2022, from <https://www.psychiatry.org/psychiatrists/practice/well-being-and-burnout/well-being-resources>
- Arab Board. (2016). Child and Adolescent Psychiatry. The Arab League - The Arab Board of Health Specialization - The Scientific Council of Psychiatry. <https://arab-board.org/file-download/download/public/909>
- Ausubel, D. P., Novak, J. D., & Hanesian, H. (1968). Educational psychology: A cognitive view (Vol. 6). holt, rinehart and Winston New York.
- Azeem, M. W., Rana, M. H., & Stubbe, D. (2015). New Era for Child Psychiatry in Pakistan. *Journal of Pakistan Psychiatric Association, 12*(1), 6.
- Barrett, E., Jacobs, B., Klasen, H., Herguner, S., Agnafors, S., Banjac, V., Bezborodovs, N., Cini, E., Hamann, C., Huscsava, M. M., Kostadinova, M., Kramar, Y., Maravic, V. M., McGrath, J., Molteni, S., Moron-Nozalea, M. G., Mudra, S., Nikolova, G., Vorkas, K. P., ... Hebebrand, J. (2020). The child and adolescent psychiatry: study of training in Europe (CAP-STATE). *European Child and Adolescent Psychiatry*. <https://doi.org/10.1007/s00787-019-01416-3>
- Beckett, D., & Hager, P. (2002). Life, work and learning: practice in postmodernity. Routledge.
- Belfer, M. B., Harper, G., & Lu, J. (2021). China's new child psychiatry training programme. *Psychoanalysis and Psychotherapy in China, 4*(2), 247–252.
- Benson, N. M., Chaukos, D., Vestal, H., Chad-Friedman, E. F., Denninger, J. W., & Borba, C. P. C. (2018). A qualitative analysis of stress and relaxation themes contributing to burnout in first-year psychiatry and medicine residents. *Academic Psychiatry, 42*(5), 630–635.
- Bower, E. A., Girard, D. E., Wessel, K., Becker, T. M., & Choi, D. (2008). Barriers to innovation in continuing medical education. *Journal of Continuing Education in the Health Professions, 28*(3). https://journals.lww.com/jcehp/Fulltext/2008/28030/Barriers_to_innovation_in_continuing_medical.5.aspx
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Busireddy, K. R., Miller, J. A., Ellison, K., Ren, V., Qayyum, R., & Panda, M. (2017). Efficacy of interventions to reduce resident physician burnout: a systematic review. *Journal of Graduate Medical Education, 9*(3), 294–301.
- Chaukos, D., Chad-Friedman, E., Mehta, D. H., Byerly, L., Celik, A., McCoy, T. H., & Denninger, J. W. (2018). SMART-R: a prospective cohort study of a resilience curriculum for residents by residents. *Academic Psychiatry, 42*(1), 78–83.
- Davis, D. A., Mazmanian, P. E., Fordis, M., Van Harrison, R., Thorpe, K. E., & Perrier, L. (2006). Accuracy of physician self-assessment compared with observed measures of competence: a systematic review. *JAMA, 296*(9), 1094–1102. <https://doi.org/10.1001/jama.296.9.1094>
- De Corte, E. (2000). Marrying theory building and the improvement of school practice: A permanent challenge for instructional psychology. *Learning and Instruction, 10*(3), 249–266.
- Deschamps, P., Bailey, S., Dubicka, B., Hansen, A. S., Hebebrand, J., Jacobs, B., Kapornai, K., Klauser, P., Kumpercak, H. G., Revet, A., Seker, A., Schroder, C., & Schumann, T. (2021). Potential effects of Covid-19 on training in CAP: the balance after a year. In *European child & adolescent psychiatry* (pp. 1–5). <https://doi.org/10.1007/s00787-021-01831-5>
- Deschamps, P., Hebebrand, J., Jacobs, B., Robertson, P., Anagnostopoulos, D. C., Banaschewski, T., Birkle, S. M., Dubicka, B., Falissard, B., Giannopoulou, I., Hoekstra, P. J., Kaess, M., Kapornai, K., Klauser, P., Revet, A., Schröder, C. M., Seitz, J., Şeker, A., & Signorini, G. (2020). Training for child and adolescent psychiatry in the twenty-first century. In *European child & adolescent psychiatry* (Vol. 29, Issue 1, pp. 3–9). <https://doi.org/10.1007/s00787-019-01467-6>
- Deschamps, P., & Jacobs, B. (2020). An international perspective on training in child and adolescent psychiatry. *European Child & Adolescent Psychiatry, 29*(1), 1–2. <https://openathens.ovid.com/secure-ssl/home.oa?idpselect=https://kclidp.kcl.ac.uk/idp/shibboleth&entityID=https://kclidp.kcl.ac.uk/idp/shibboleth&T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=med17&AN=31950370>
- Dingle, A. D., & Kolli, V. (2020). Ethics in Child and Adolescent Psychiatry Training: What and How Are We Teaching? *Academic Psychiatry, 44*(2), 168–178. <https://openathens.ovid.com/secure-ssl/home.oa?idpselect=https://kclidp.kcl.ac.uk/idp/shibboleth&entityID=https://kclidp.kcl.ac.uk/idp/shib>

- boleth&?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=med17&AN=31820367
- European Federation of Psychiatric Trainees. (2021). Guidelines of the EFPT Exchange programme. <http://www.sfbup.se/wp-content/uploads/2018/11/Guidelines-of-the-EFPT-Exchange-Programme.pdf>
- Gnanavel, S., Sharma, P., Sebela, A., Alemany, T. G., Chang, J. P.-C., de Medeiros Filho, M. V., Kusi-Mensah, K., Kaligis, F., Kato, H., Le, H. K., Morimoto, K., Martsenkovskiy, D., Singh, D. K. M., Pawar, A., Seker, A., Sittanomai, N., Syed, S., Karki, U., Parmar, A., & Tan, M. (2020). Child and adolescent psychiatry training curriculum: a global trainee's perspective. *BJPsych International*, 17(3), 69–71. <https://doi.org/DOI: 10.1192/bji.2020.8>
- Gregoric Kumperscak, H., Clausen, C., Anagnostopoulos, D., Barac Otasevic, Z., Boricevic Marsanic, V., Burgic, M., Como, A., Nussbaum, L., Pejovic Milovancevic, M., Raleva, M., Sartorius, N., Shahini, M., Terziev, D., & Skokauskas, N. (2020). Child and adolescent psychiatry training and mental health care in Southeast Europe. *European Child & Adolescent Psychiatry*, 29(1), 29–39. <https://openathens.ovid.com/secure-ssl/home.oidpselect=https://kclidp.kcl.ac.uk/idp/shibboleth&entityID=https://kclidp.kcl.ac.uk/idp/shibboleth&?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=med17&AN=31227911>
- Guille, C., Zhao, Z., Krystal, J., Nichols, B., Brady, K., & Sen, S. (2015). Web-based cognitive behavioral therapy intervention for the prevention of suicidal ideation in medical interns: a randomized clinical trial. *JAMA Psychiatry*, 72(12), 1192–1198.
- Hager, P., & Halliday, J. (2007). *Recovering informal learning: Wisdom, judgement and community* (Vol. 7). Springer Science & Business Media.
- He, F., Chen, S., Ke, X., & Zheng, Y. (2020). Training status of child and adolescent psychiatrists in China. *European Child and Adolescent Psychiatry*, 29(1), 83–88. <https://doi.org/10.1007/s00787-019-01453-y>
- Hirota, T., Guerrero, A. P. S., Sartorius, N., Fung, D., Leventhal, B., Ong, S. H., Kaneko, H., Bungnyun, K., Cho, S.-C., Skokauskas, N., & Consortium on Academic Child and Adolescent Psychiatry in the Far East. (2014). Child and Adolescent Psychiatry in the Far East. *Psychiatry and Clinical Neurosciences*, 73(2), 84–89. <https://doi.org/10.1111/pcn.12248>
- Homberger, A. (1926). *Vorlesungen Über Psychopathologie Des Kindesalters*. Verlag von Julius Springer. <https://doi.org/10.1007/978-3-642-99364-0>
- Huba, M. E., & Freed, J. E. (2000). Learner-centered assessment on college campuses: Shifting the focus from teaching to learning. ERIC.
- Hunt, J., Reichenberg, J., Lewis, A. L., & Jacobson, S. (2020). Child and adolescent psychiatry training in the USA: current pathways. *European Child & Adolescent Psychiatry*, 29(1), 63–69. <https://openathens.ovid.com/secure-ssl/home.oidpselect=https://kclidp.kcl.ac.uk/idp/shibboleth&entityID=https://kclidp.kcl.ac.uk/idp/shibboleth&?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=med17&AN=31515613>
- Institute of Medicine (US) Committee on Quality of Health Care in America. (2000). *To Err is Human: Building a Safer Health System* (L. T. Kohn, J. M. Corrigan, & M. S. Donaldson (Eds.)). <https://doi.org/10.17226/9728>
- Jacobs, B. W., Barrett, E., Klasen, H., Robertson, P., Vasková, L., Snircová, E., & Sönmez, E. (2018). Child and Adolescent Psychiatry Training in Europe. In M. Hodes, S. Shur-Fen, & P. J. de Vries (Eds.), *Understanding Uniqueness and Diversity in Child and Adolescent Mental Health* (pp. 325–350). Elsevier inc.
- Javier, F., Chilton, J., & Martin, A. (2019). Wellbeing: Identification and prevention of Burnout, Depression and Suicide Among Child Mental Health Clinicians. In J. Reys & A. Martin (Eds.), *IACAPAP e-Textbook of Child and Adolescent Mental Health*. International Association for Child and Adolescent Psychiatry and Allied Professions.
- Jouquan, J., VIERSET, V., Jaffrelot, M., Romanus, C., & Parent, F. (2013). Promouvoir les pédagogies actives comme soutien à la pratique réflexive et à l'apprentissage en profondeur. *Penser La Formation Des Professionnels de La Santé*, 245–283.
- Kanner, L. (1935). *Child Psychiatry*. Chas C Thomas.
- Karabekiroglu, K., Doğangün, B., Hergüner, S., von Salis, T., & Rothenberger, A. (2006). Child and adolescent psychiatry training in Europe: differences and challenges in harmonization. *European Child & Adolescent Psychiatry*, 15(8), 467–475. <https://doi.org/10.1007/s00787-006-0599-3>
- Kasralainy Faculty of Medicine, Cairo University. (n.d.). Retrieved March 28, 2022, from <https://medicine.cu.edu.eg/index.php/en/departments/22-microbiology19/34-about-us>
- Knowles, M. S., Holton III, E. F., & Swanson, R. A. (2014). *The adult learner: The definitive classic in adult education and human resource development*. Routledge.
- Knut Aspegren. (1999). Teaching and learning communication skills inmedicine: a review with quality grading of articles- BEME Guide n02. <https://www.bemecollaboration.org/downloads/1168/BEME02.pdf>
- Kommu, J., Sagar, V., & Jacob, P. (2020). Specialty training in child and adolescent psychiatry in India. *European Child & Adolescent Psychiatry*, 29(1), 89–93. <https://openathens.ovid.com/secure-ssl/home.oidpselect=https://kclidp.kcl.ac.uk/idp/shibboleth&entityID=https://kclidp.kcl.ac.uk/idp/shibboleth&?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=med17&AN=31529268>
- Lim, C. G., Ong, S. H., Chin, C. H., & Fung, D. (2015). Child and Adolescent Psychiatry Services in Singapore. *Child and Adolescent Psychiatry and Mental Health*, 9(7), 1–7. <https://doi.org/10.1186/s13034-015-0037-8>
- Malterud, K. (2001). Qualitative research: standards, challenges, and guidelines. *The Lancet*, 358(9280), 483–488.
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103–111.
- Mays, N., & Pope, C. (2000). Assessing quality in qualitative research. *Bmj*, 320(7226), 50–52.
- Miller, G. E. (1990). *The assessment of clinical skills/*

- competence/performance. *Academic Medicine*, 63, S63–S67.
- Moore Donald, J. (2008). How physicians learn and how to design learning experiences for them: An approach based on an interpretive review of evidence. *Continuing Education in the Health Professions: Improving Healthcare Through Lifelong Learning*, 30–62.
- Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in mental health services: A review of the problem and its remediation. *Administration and Policy in Mental Health and Mental Health Services Research*, 39(5), 341–352.
- Müller, C., & Mildenerger, T. (2021). Facilitating flexible learning by replacing classroom time with an online learning environment: A systematic review of blended learning in higher education. *Educational Research Review*, 34, 100394.
- Nestel, D., & Bearman, M. (2015). Theory and simulation-based education: Definitions, worldviews and applications. *Clinical Simulation in Nursing*, 11(8), 349–354.
- Park, Y. S., Hodges, B. D., & Tekian, A. (2016). Evaluating the paradigm shift from time-based toward competency-based medical education: implications for curriculum and assessment. In *Assessing competence in professional performance across disciplines and professions* (pp. 411–425). Springer.
- Pelaccia, T. (2013). En marge de la section. La recherche en éducation médicale: un regard épistémologique. In *Penser la formation des professionnels de la santé* (pp. 305–310). De Boeck Supérieur.
- Pereira-Sanches, V., & Virani, S. (2021). IACAPAP Bulletin Issue 64. The World Network of Psychiatric Trainees: A Global Home of Psychiatry Residents and Fellows. <https://iacapap.org/news/the-world-network-of-psychiatric-trainees-a-global-home-of-psychiatry-residents-and-fellows.html>
- Pinto da Costa, M. (2020). Early career psychiatrists - history, 2020 and beyond. In *World psychiatry : official journal of the World Psychiatric Association (WPA)* (Vol. 19, Issue 1, pp. 127–128). <https://doi.org/10.1002/wps.20712>
- Rao, P., Caunt, J. N., Wong, J. W. Y., Moore, J. K., & Zepf, F. D. (2020). Child and adolescent psychiatry training in Australia and New Zealand. *European Child & Adolescent Psychiatry*, 29(1), 95–103. <https://openathens.ovid.com/secure-ssl/home.oa?idpselect=https://kclidp.kcl.ac.uk/idp/shibboleth&entityID=https://kclidp.kcl.ac.uk/idp/shibboleth&?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=med17&AN=31641901>
- Rey, J. M., Assumpção Jr, F. B., Bernad, C. A., Çuhadaroğlu, F. Ç., Evans, B., Fung, D., Harper, G., Loidreau, L., Ono, Y., Püras, D., Remschmidt, H., Robertson, B., Rusakoskaya, O. A., & Kari, S. (2015). History of Child Psychiatry. In J. M. Rey (Ed.), *IACAPAP Textbook of Child and Adolescent Mental Health* (Issue J. 10, pp. 1–72). IACAPAP. <http://iacapap.org/wp-content/uploads/J.10-History-Child-Psychiatry-2015.pdf>
- Rotenstein, L. S., Torre, M., Ramos, M. A., Rosales, R. C., Guille, C., Sen, S., & Mata, D. A. (2018). Prevalence of burnout among physicians: a systematic review. *Jama*, 320(11), 1131–1150.
- Royal Australian and New Zealand College of Psychiatry. (2015). Certificate of Advanced Training in Child and Adolescent Psychiatry - Summary of training requirements. <https://www.ranzcp.org/pre-fellowship/about-the-training-program/certificates-of-advanced-training/child-and-adolescent-psychiatry>
- Runyan, C., Savageau, J. A., Potts, S., & Weinreb, L. (2016). Impact of a family medicine resident wellness curriculum: a feasibility study. *Medical Education Online*, 21(1), 30648.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68.
- Schleimer, K. (2012). The History of IACAPAP. https://iacapap.org/content/uploads/History_of_IACAPAP-75-YEARS.pdf
- Schon, D. A. (1984). *The reflective practitioner: How professionals think in action* (Vol. 5126). Basic books.
- Scivoletto, S., Fondello, M. A., Otoch, L. N., Celeri, E. H. R. V., Caetano, S. C., Graeff-Martins, A. S., Rosario, M. C., Pallia, R., Gutierrez, A., Valdivia, M., Viola, L., & Polanczyk, G. V. (2020). Child and adolescent psychiatry training in Brazil, Argentina, Uruguay and Chile: current panorama and future challenges. *European Child & Adolescent Psychiatry*, 29(1), 71–81. <https://openathens.ovid.com/secure-ssl/home.oa?idpselect=https://kclidp.kcl.ac.uk/idp/shibboleth&entityID=https://kclidp.kcl.ac.uk/idp/shibboleth&?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=med17&AN=31802272>
- Shanafelt, T. D., Boone, S., Tan, L., Dyrbye, L. N., Sotile, W., Satele, D., West, C. P., Sloan, J., & Oreskovich, M. R. (2012). Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Archives of Internal Medicine*, 172(18), 1377–1385.
- Simmons, M., Barrett, E., Wilkinson, P., & Pacherova, L. (2012). Trainee experiences of Child and Adolescent Psychiatry (CAP) training in Europe: 2010–2011 survey of the European Federation of Psychiatric Trainees (EFPT) CAP working group. *European Child & Adolescent Psychiatry*, 21(8), 433–442. <https://doi.org/https://dx.doi.org/10.1007/s00787-012-0275-8>
- Sourander, A., Chudal, R., Skokauskas, N., Al-Ansari, A. M., Klomek, A. B., Pornnoppadol, C., Kolaitis, G., Maezono, J., Steinhausen, H.-C., Slobodskaya, H., Kaneko, H., Regmee, J., Li, L., Nguyen, M. H., Grimland, M., Osokina, O., Ong, S. H., Praharaj, S. K., Lesinskienė, S., ... Lehti, V. (2018). Unmet needs of child and adolescent psychiatrists among Asian and European countries: does the Human Development Index (HDI) count? *European Child & Adolescent Psychiatry*, 27(1), 5–8. <https://doi.org/10.1007/s00787-017-1095-7>
- Strohmeyer, W. (1923). *Die Psychopathologie des Kindesalters: Vorlesungen Für Mediziner Und Padagogen*. Springer-

Verlag Heidelberg GmbH.

- Tateno, M., Inagaki, T., Saito, T., Guerrero, A., & Skokauskas, N. (2017). Current Challenges and Future Opportunities for Child and Adolescent Psychiatry in Japan. *Psychiatry Investigation*, 14, 525–531. <https://doi.org/10.4306/pi.2017.14.5.525>
- Taylor, D. C. M., & Hamdy, H. (2013). Adult learning theories: Implications for learning and teaching in medical education: AMEE Guide No. 83. *Medical Teacher*, 35(11), e1561–e1572. <https://doi.org/10.3109/0142159X.2013.828153>
- Tennant, M. (2019). *Psychology and adult learning: The role of theory in informing practice*. Routledge.
- Thomson O'Brien, M. A., Freemantle, N., Oxman, A. D., Wolf, F., Davis, D. A., & Herrin, J. (2001). Continuing education meetings and workshops: effects on professional practice and health care outcomes. *The Cochrane Database of Systematic Reviews*, 2, CD003030. <https://doi.org/10.1002/14651858.CD003030>
- Tielemans, C., de Kleijn, R., van der Schaaf, M., van den Broek, S., & Westerveld, T. (2021). The Westerveld framework for interprofessional feedback dialogues in health professions education. *Assessment & Evaluation in Higher Education*, 1–17.
- UEMS-CAP, & Jacobs, B. (2014). Training Requirements for the Specialty of Child and Adolescent Psychiatry. UNION EUROPÉENNE DES MÉDECINS SPÉCIALISTES (EUROPEAN UNION OF MEDICAL SPECIALISTS). http://www.uemscap.eu/uploads/44/Training-Requirement-for-Child-adolescent-Psychiatry-approved_by_UEMS_Council_April_2014-pdf
- UEMS-CAP, Deschamps, P. and Schumann T. (2021) UEMS-CAP Curriculum Framework for guidance in CAP training, version 2021. <http://www.uemscap.eu/news/17/193/UEMS-CAP-Curriculum-Framework-revision>
- UEMS. (2015). UEMS Statutes (revised). https://www.uems.eu/__data/assets/pdf_file/0003/25257/UEMS-2015-13-en-amend-04-15-STATUTES-UEMS.pdf
- Van Merriënboer, J. J. G., & Kirschner, P. A. (2017). *Ten steps to complex learning: A systematic approach to four-component instructional design*. Routledge.
- Wenger, E. (1998). Communities of practice: Learning as a social system. *Systems Thinker*, 9(5), 2–3.
- Wiguna, T., Buhdhi, M., Humris-Pleyte, E., & Prasetyo, J. (2016). The Grandfather's Legacy: Child and Adolescent Psychiatry Workforce and Research in Indonesia. *JAACAP-Connect*, 55(10), S56–S57. <https://doi.org/https://doi.org/10.1016/j.jaac.2016.07.658>
- Wissow, L., Gadomski, A., Roter, D., Larson, S., Lewis, B., & Brown, J. (2011). Aspects of mental health communication skills training that predict parent and child outcomes in pediatric primary care. *Patient Education and Counseling*, 82(2), 226–232.
- Wissow, L. S., Gadomski, A., Roter, D., Larson, S., Brown, J., Zachary, C., Bartlett, E., Horn, I., Luo, X., & Wang, M.-C. (2008). Improving child and parent mental health in primary care: a cluster-randomized trial of communication skills training. *Pediatrics*, 121(2), 266–275.
- Zitter, I., Hoeve, A., & de Bruijn, E. (2016). A design perspective on the school-work boundary: A hybrid curriculum model. *Vocations and Learning*, 9(1), 111–131.