

Review Article

Adolescent Girls in Residential Care: Biopsychosocial Characteristics

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Abstract

Aim: The aim of this paper is to provide an overview of the characteristics of adolescent girls in residential care (AGRC) as a concretisation of 'Multiple and Complex Problems (MCP)' in this population. Insight in their problem 'profile' could guide care delivery.

Background: Adolescent girls in residential care constitute a vulnerable group, at high risk for MCP. However, the literature on characteristics of AGRC is scarce and scattered and a comprehensive overview of these distinctive aspects is lacking.

Methodology: A literature search was conducted, using PubMed, the Web of Science, ERIC and PsycInfo, with the search terms ((institutionalized) OR institutionalization) OR (institutional care)) and (residential care), both combined with 'adolescents' and 'girls' in order to identify literature describing characteristics of this population.

Results: The resulting description of characteristics of AGRC draws on the biopsychosocial (BPS) model, and recognizes the factors that lead to multiple needs at different time points in their care trajectory.

Conclusion: This comprehensive overview of biopsychosocial characteristics and concretisation of the multiple needs of AGRC can inform care delivery planning. Cross-sectoral collaborative care, with a focus on continuity of care and societal integration, seems valuable in order to meet their needs.

INTRODUCTION

'Multiple and complex problems' (MCP) are a growing reality in several health and social care settings, and pose a serious challenge to care delivery [1,2]. The essence of MCP is described as issues being both broad – different problems that are interrelated – and deep – profound, severe problems [3] that bring patients in contact with a multitude of services [1]. These 'multiple' and 'complex' problems are often not defined more concretely for various subpopulations [4], which complicates the development of adequate care delivery programs [5].

Child serving agencies face a growing number of youths whose personal development and integration into society are threatened by such a combination of profound and intertwined

difficulties in the domains of mental health, family, education and societal integration [6]. Their intertwined and poorly defined needs are not met by current service provision, that is often fragmented and does not account for the variety of problems and the interaction between them [5]. The common denominator for these youths with multiple needs is that treatment most often requires them to reside away from their home in a non-family setting, in residential care.

Adolescents placed in out-of-home care are among the most vulnerable members of our society and have multiple and complex needs [7,8]. Residential facilities are, in many Western countries, an option of last resort for youths who, as a result of the multiple problems they present, have become a danger to themselves or to their environment [9].

While the combination of risks and strengths may be diverse, adolescents in these care facilities also have many commonalities [10,11] including physical, psychological, and social characteristics that put them at risk for developing multiple intertwined problems and interfere with their personal development and societal integration.

According to the limited data available, adolescent girls in residential care represent a particularly vulnerable population. Girls in residential care are known to face gender specific risks [12,13] and encounter more physical [14] and mental health difficulties [15] and worse social outcomes than boys [16]. Facing difficulties on several domains during adolescence, a period characterized by rapid biological, psychological, and social growth [17,18], increases their impact [19]. It is known that MCP in adolescent girls carry a negative personal prognosis (as a predictor of poor (mental) health, substance abuse, delinquency, intrafamilial violence and dysfunctional parenting) [20-22] and yield a high societal cost (due to unemployment and high service use) [21,20].

The literature poorly characterizes the population of adolescent girls in residential care, and findings regarding their distinctive features and needs are scattered [8,23,24]. Researchers have often focused on isolated characteristics these youths present at a specific time in their trajectories, thereby not accounting for the complexity of intertwined needs. However, in reality strengths and difficulties encountered in different areas (biological, psychological, social) overlap, and acute events may be followed or influenced by chronic problems. Recognition of the problem profile and the ways in which characteristics interact over time is essential for adapting care delivery to their MCP [25].

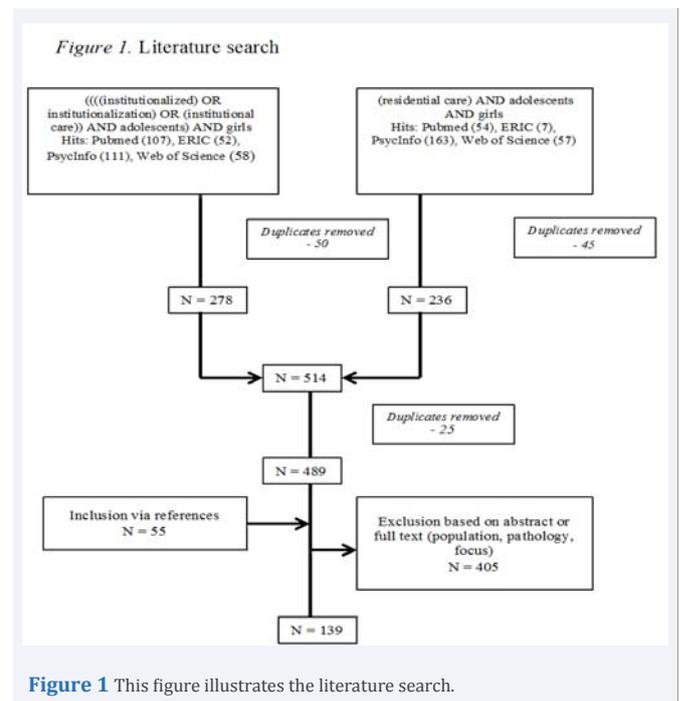
However, a clear view of the problems present in different populations with MCP is essential in order to know what the therapeutic arsenal should contain (1) and which needs should be addressed primarily [5].

Our aim is to characterize the population of AGRC and describe available research in biological, psychological and social areas, with attention to different time points in their care trajectory. This leads us to the following research question: What is known in the literature about biological, psychological and social characteristics of AGRC?

METHOD

To identify published articles on the characteristics of AGRC, an electronic database search of Pubmed, the Web of Science, the Electronic Resources Information Center (ERIC) and PsycInfo was conducted with the following search terms: ((institutionalized) OR institutionalization) OR (institutional care)) and (residential care), both combined with 'adolescents' and 'girls'. All articles identified in these two combined searches (N = 489, duplicates excluded) were reviewed for possible inclusion and 55 additional articles were included through the references of selected papers, when they described further characteristics of AGRC.

Inclusion criteria were age, gender, and type of care setting. Papers were selected when they reported any findings on adolescent girls (aged 10–18 years) in a residential care setting. To avoid misinterpretation, articles in languages other than



English, Dutch or French were excluded. Further exclusion criteria were reporting about foster care, psychiatric inpatient units or juvenile detention. Ultimately, findings from 139 papers were used (Figure 1).

RESULTS

Table (1) results were organized into categories according to the time point in the care trajectory of the characteristic described (at entry into care, during the stay, or post-residential period). This categorization of data is needed in order to maximize potential use for care trajectories, because different aetiologies and a different treatment approach may apply to characteristics at these distinct time points in the care trajectory (Figure 2).

Also, characteristics were further subdivided in biological, psychological and social areas. By using a biopsychosocial (BPS) model [26] to organize literature findings, we aim to recognize the multiplicity of factors that may contribute to resilience, or place AGRC at risk of developing and sustaining diverse problems in biological, psychological and social domains (Figure 2,3). Table (1) summarizes the literature findings.

AT ENTRY INTO CARE

Biological and psychobiological characteristics

Medication and health: Pharmacological treatment is frequent in youths at entry into residential care, with 31-77% taking psychotropic medication [27-31] and 31% using non-psychotropic medication [32]. Baker found that 54% of girls who entered residential care had a history of psychotropic medication use [33]. Moreover, polypharmacy is reported in 12-57% of the medicated group [29,31,34].

At entry into care, a high rate of physical health problems is reported. One-third of youths have at least one diagnosable medical condition, most frequently asthma, seizures or obesity

Table 1: This table summarizes the main literature findings regarding characteristics of Adolescent Girls in Residential Care. Findings are organized in domains (biological, psychological and social); and categorized by timing in the care trajectory (before care, while in care, and after the residential care).

Biological	Biopsychological	Psychological	Psychosocial	Social	Biopsychosocial
AT ENTRY INTO RESIDENTIAL CARE					
Medication - high use of psychopharmaca (26-77%) and other medication (31%); frequent polypharmacy (13 - 57%) [29,30,31,32,34,38]	Psychopathology - frequent psychopathology: especially externalising disorders (impulsivity, antisocial behavior) (33-69%) and internalising disorders (mood and anxiety disorders) (50-57%)	Negative emotionality - emotional difficulties, negative mood [56,59,69,107]	Residential instability -placement changes, relational instability [8,42, 46,49,59,67-69,169,170,106]	Family composition - rarely intact core family [10,33, 58,59,64,106,122]	Child abuse and neglect - physical neglect (44-86%); physical abuse; (34-67%); sexual abuse (12-47%); associated with additional psychosocial and emotional problems and heightened risk of re-abuse
Somatic problems - high prevalence of physical illness and physical complaints. Somatic disorders are associated with higher prevalence of psychopathology and with higher placement instability.	Automutilation and suicidality - more frequent than in general population adolescents	Trauma - high incidence of multi-trauma, associated with emotional and behavioral problems		Parental problems - psychopathology (30-66%); substance abuse (23-57%); intrafamilial violence, criminality, prostitution; parenting difficulties	
Older age - older age at entry into care is associated with higher prevalence of emotional and behavioral disorders	IQ - in low to median range; lower IQ associated with more psychopathology			Low SES and related issues - family of origin facing unemployment, poverty, housing difficulties; low SES associated with more developmental pathology	
Neuroendocrine dysfunction - HPA-axis dysfunction found at entry into care				Negative interactions with peers - negative interactions	
				School problems - absenteeism, low motivation, special needs.	
				Care delivery - various referrals, 1/2 has previous psychiatric hospitalization.	
				Justice system - frequent contact	
WHILE IN RESIDENTIAL CARE					
Medication - 49-77%, pharmacotherapy	Psychopathology - frequent (52-96%), mostly externalising (28-51%), followed by mood/anxiety (12-54%), substance abuse (29-59%), autism spectrum disorders (15-17%), intellectual disability (8-10%) and psychosis (8-12%). Specifically for girls: Psychopathology in 76%, conduct disorder 51-53%, depression 29-36%, autism spectrum disorders 24%, ADHD 18% and psychosis 3%. Frequent comorbidity (9-37%)	Trauma - frequent trauma history, trauma history associated with emotional and behavioral problems in care [19,92]	Relational instability - changing contacts, difficulties engaging in stable relations, conflicts in close relationships	Parental monitoring and contact - less parental monitoring and contact associated with delinquency [172,173]	Child abuse and neglect in care

Older age - related with more emotion and behavior problems	Attachment problems - frequent attachment disorder and attachment problems; nonautonomous representations	Negative emotionality	Stigma - difficulties due to stigma while in care	Negative interactions with peers, peer - violence - bullying and being bullied, girls have more problematic peer interactions than boys	
Gender - girls have worse social functioning and more psychopathology	Limited behavior - emotion - and impulse regulation with substance abuse (13-43%) and automutilation (6-44%)	Low self-confidence	Fuge - frequent absconding	School problems - special needs at school, disciplinary problems, lower grades, absenteeism; school problems higher in case of placement instability	
	Health Related Quality of Life lower than in general population [140]			Justice-system - delinquency, police contacts more frequent than general population	
	Learning difficulties [37,69,97,106,]			Placement instability - negative influence on behavior, social functioning and school; insufficient collaboration between agencies	
AFTER RESIDENTIAL CARE					
Medication - higher medication use related to more difficult insertion after care [14]	Psychopathology - frequent (67%); 10% needs psychiatric residential care within 6 months of leaving care	Negative emotionality - negative mood	Relational instability - lack of social network and family support is associated with negative outcome	Family composition and parenting difficulties - non intact core families, teen pregnancy, parenting problems, intrafamilial violence	Intrafamilial violence -
Physical complaints - related to more negative outcome after care [14]		Low self - confidence [118]		Low SES - more so for girls than boys	
		Stress - level associated with negative outcome regarding mental health and social functioning [124]		Education and work difficulties - lower educational level, unemployment, for girls more so than for boys	
				Justice system - frequent contact with justice, more involvement in criminal activities than general population; for girls more so than for boys	

[35,15,14,36]. Girls are even more likely than boys to have a medical diagnosis [14]. These physical health problems often further complicate the clinical picture [32,36]. Associations of poor physical health with psychopathology, placement instability and negative outcome on measures of social functioning are reported [14,37], and, conversely, psychopathology is related to a greater risk for physical health problems and more prescription medications [32].

Psychopathology

Up to 76% of youths entering residential care meet axis I or II DSM diagnostic criteria [38,39]. Externalizing problems occur in 33-69% [35,40] and anxiety/mood disorders are reported in 50-57%. High rates (up to 33%) of posttraumatic symptoms [41] and substance abuse (40%) [27], as well as frequent self-harm (up to 28%) and suicidal actions (up to 45% for girls) [27,32,35,42], are also reported. Girls score significantly more pathologically than boys on a variety of measures including suicide ideation, negative

self-evaluation and symptoms of internalizing, behavioral, eating, and substance abuse disorders [28,39] and 31% of them have a history of psychiatric hospitalization [27]. Low to average IQ scores are reported, with lower scores being related to further developmental problems and psychopathology [37,43-46].

Psychological characteristics

Trauma and abuse: Histories of traumatization and abuse are frequent in youths entering residential care. Up to 98% of them have experienced at least one traumatic event in their lifetime [47-50] and a mean of 2.25-2.89 traumas is reported [47]. A history of neglect is reported in 44-86%, physical abuse in 34-67%, and sexual abuse in 12-47% of cases [27,35,44,50-52]. Early trauma is directly related to mental health problems in female adolescents in residential care [28,43,48,19,53-56].

Social characteristics

Family and relations: Adolescents in residential care often

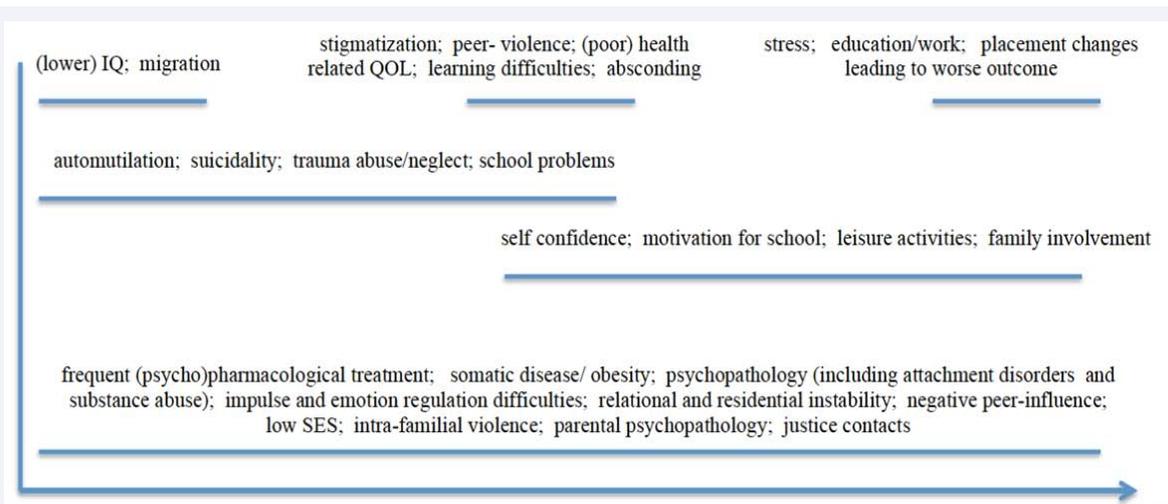


Figure 2 This figure illustrates the characteristics of Adolescent Girls in Residential Care. The lines indicate in which of three periods (at entry, while in residential care, or after residential care) each of the characteristics is identified in the literature.

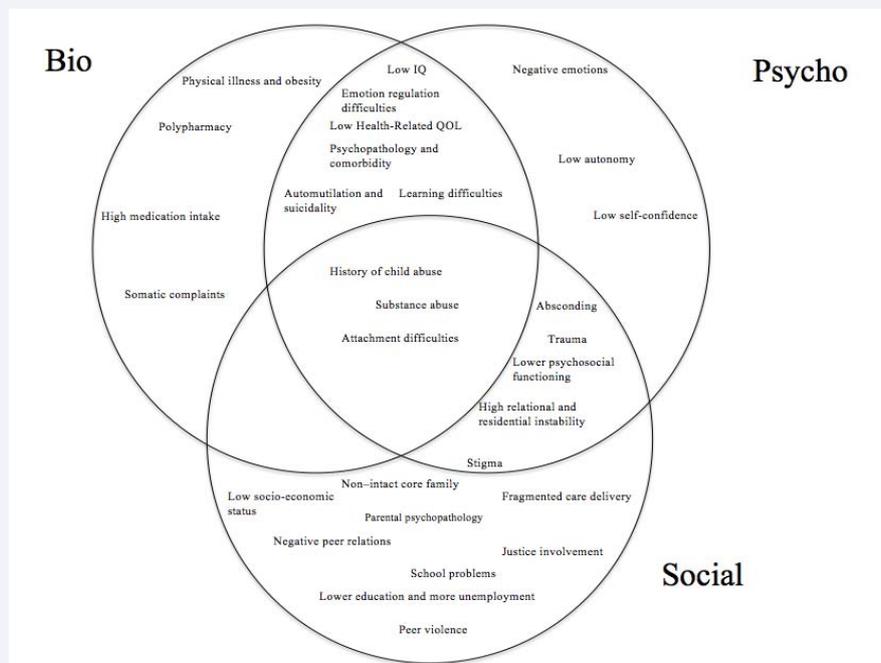


Figure 3 Main characteristics of AGRC in Biopsychosocial Model.

come from disadvantaged backgrounds [49] and so-called 'broken homes' (single-parent families in 34.8-42.1%, re-constituted family in 25.5-81%, and adoptive families in 7% of cases) [12,57,58].

Parents of AGRC often have low education, unemployment (15-79%), low income, low socio-economic status (38-50%) and housing disadvantages or are homeless (6-20%) [44,53,59]. Parental psychopathology (30-66%), substance abuse (23-57%), and involvement in criminality (21-50%) or prostitution (8%), as well as intrafamilial violence are frequent, and up to one-third of parents have lost custody [19,40,57,60-65]. Relational instability characterizes youths in residential care, and has a negative

impact on their mental health [66-69,8,70]. However, more than two-thirds of youths at entry into care report feeling as though they have at least one adult in their life in whom they can trust; most often a child care counsellor or birth parent [42,47].

Education and care history: School problems, such as poor motivation or absenteeism, are frequent at entry into residential care [43,19,8]. Adolescents entering residential care are also more likely to have had contact with judicial authorities than the general population of their age, with a history of juvenile delinquency behaviors in 42% of cases [27,71]. Placement decisions are based on a variety of moral and legal considerations [34] and referral sources are variable. There is a lack of research

on the relationship between the circumstances of placement and youth functioning [57]. Up to 27-55% of adolescents entering residential care report earlier placements (with an average of 1.7-5 prior placements) [35,38,40,43].

While in care

Biological and psychobiological characteristics:

1. Medication and health: A high rate of psychotropic medication utilization (49-77%) and polypharmacy (13-57%) is reported for adolescents in residential care [29,31,34,72,73]. Adolescents in residential care have poor health-related Quality of life (QOL) [74].

2. Psychopathology: Adolescents in residential care have high rates of psychiatric disorders (52-96%), mostly externalizing problems (28-51%), followed by anxiety/mood problems (12-54%), substance abuse (29-59%), autism spectrum disorders (15-17%), intellectual limitation (8-10%) and psychosis (8-12%); with comorbidities in up to 37% of cases [15,34,45,50,75-77,58,78]. Additionally, high rates of self-harm (up to 33%) and suicidal actions (up to 32%) [35,61,79] and substance use problems (up to 37% for girls) [27,80-84] are reported. Consistent gender differences are found when assessing youths in residential care, with girls having higher levels of internalizing and externalizing psychopathology and aggressive behavior [15]. For girls, conduct disorder is reported most frequently (51-53%), followed by depression (29-36%), ASS (24%), ADHD (18%) and psychosis (3%) [34,85]. Sexual risk behaviors [86,87] and absconding (23-44%) are highly prevalent in this population [50,88].

Despite these high rates of psychopathology [89,90], only 14-27% of youths in residential care have current contact with child and adolescent psychiatric services [62,91].

Psychological characteristics

Trauma and attachment: Children and adolescents who are placed in out-of-home care are often damaged by traumatic experiences before the out-of-home placement, and possible re-abuse in care therefore implicates cumulative harm [92].

The attachment representations of adolescents in residential care are predominantly non autonomous, and those with preoccupied attachment representations show the highest levels of truancy and rule breaking [9,93,94].

Self-esteem and autonomy: AGRC have lower self-acceptance levels, lower emotional and behavioral autonomy and lower occupational aspiration compared to the general population [95-99].

Social characteristics

Relations: Negative parent-child relationships are a potential risk, in that the adolescent will generalize these negative feelings to other adults, e.g., staff [9,50,100]. Additionally, looked-after adolescents regularly bully others (16 %), whereas 15%-30% are themselves regular victims of bullying [35,37,50,101]. A hopeful finding in the literature is that it is possible for youths in residential care settings to establish positive relationships, and this social capital is crucial to maximize success [66,102,103].

The young adults interviewed by Gallagher and Green (2012) appeared to share this view as to the importance of relationships, and emphasized that relationships had been essential to their well-being and development. Social resources appear even more influential in girls, compared to boys, in adolescents in residential care [104]. The level of family involvement in treatment is generally regarded as predictive of post-treatment patterns of adjustment [19,60,105].

Education, justice system and care history: Adolescents in care demonstrate poor academic performance [37,106,97] and disciplinary problems at school across placements settings [35,50,106,101,107,108]. Instability (e.g., changing schools) and suboptimal interactions between the care and education system contribute to school failure [97,107].

For girls, attachment to school was a key predictor of lower delinquency in mid-adolescence [109].

Police contacts are more common (30%) among youths in residential care than in the general population (8%). Although children may be placed because of serious behavioral problems, residential care itself can lead to increased involvement with the justice systems through modeling, contagion effects, and a lack of adequate regulation [65,110,16] or by preventing youths from accessing peers who are coping well and can provide positive peer support [96]. A considerable share of violence occurring in public care settings is committed by fellow residents [102], and young people in care consistently highlight this issue as one of their main concerns [111,112]. Peer violence has a high prevalence and destructive consequences for children and adolescents in residential care, as most report having been verbally (73%) and indirectly (62%) victimized by their peers at least once in the last month [57,111,113]. Girls, and adolescents with higher levels of adjustment difficulties, are more vulnerable to victimization by peers [111,113,114].

A common feature of residential care is the lack of a stable environment, whether due to staff changes or because the children themselves are moved, and this makes it difficult for the child to establish affective ties [49]. Placement changes are frequent in children and adolescents in residential care (with a mean of 5.1 changes) [115]. The negative impact of changing units has been observed in relation to drug use, criminality, emotional regulation and psychosocial stress, and educational, laboral and social insertion [49,50,65,115-117].

Adolescents in residential care settings that offer more leisure-time activities and academic tutoring show greater satisfaction with their life and achieve greater educational success in adulthood [57,107,108].

After care

Biological and biopsychological characteristics:

1. Health: Factors related to poor physical health, specifically non-psychotropic medication prescriptions, are associated with worse mental health outcomes at discharge and follow-up. Furthermore, health inequalities and unhealthy lifestyles and behaviors are common among young people leaving care [14,83].

2. Psychopathology: Overall, approximately 10% of youths

were admitted to a psychiatric hospital within their first six months post-discharge [42]. Poor emotional well-being and higher malaise scores figure among the negative outcomes faced by previously institutionalized young adults, especially females [79,118,119]. Additionally, when compared with a control group brought up in the same socially disadvantaged area, institution-reared women show much higher rates of a wide spectrum of adult psychosocial problems, including personality disorders [119].

At discharge from a residential program, abused youths, especially youths experiencing both sexual and physical abuse, had significantly higher anxiety, affective, behavior, and eating disorder symptoms and were on more psychotropic medications than non-abused youths [28]. In contrast, emotional regulation and social abilities are related to a positive outcome after residential care treatment [16,49].

Psychological characteristics: Feeling supported by family while in residential care, is a crucial determinant in post-discharge adaptation [49,120].

Social characteristics: Previously institutionalized males and females perceive less caring and trust from intimate others, whether it is from their parents, peers, or partner [121]. Higher rates of marital discord and disruption, earlier transitions to parenthood and higher rates of breakdown in their own parenting are found in institution-reared women [119]. Also, violence between romantic partners, whether as the perpetrator or as the victim, is more frequent among young adults who have been previously institutionalized [121]. However, Huefner et al. (2007), found that time spent in a treatment-oriented residential care program was associated with lower adult intimate partner violence rates [122].

Socio-economic disadvantages in adulthood are strongly associated with being institutionalized during adolescence, even more so for females [121]. Moreover, adolescent residents in long-term residential treatment who have had little residential stability after treatment have lower socio-economic status after discharge [123,124].

Education and care

Even in comparison to other children with similar socio-economic backgrounds, former child welfare clients have a three times higher risk of becoming young adults with only a basic education, especially when entering care during adolescence [125]. Furthermore, unemployment rates (48%) are high, with the number of placements and completion of high school as predictors of employment status [49,79,103,107,124-126]. The situation is even more alarming for women, with higher rates of unemployment, even though they had received more job training than men [16]. Having friends outside care who do well at school, attending school regularly, and the continuity and stability of care are strongly associated with educational success when transitioning from residential care [108]. Being raised 'in care' is a risk factor for delinquency and adult criminality, even more so for girls [65,79,124,127-130]. There is a high rate of arrests among children in the out-of-home treatment system, with an arrest before, during or after treatment in 40% of treatment episodes [131].

In several studies, the significant gains adolescents make while in residential care are not maintained after leaving the institution, when youths face numerous challenges while adapting to new settings or returning to placements that have been unsuccessful in the past [23,46,79,121]. A lack of continuity in placements, and difficulties with education, hinder many of these youths [132], leading to a disappointing picture of academic underachievement, underemployment, and involvement with the criminal justice system, unstable living arrangements, economic insecurity, poor social relationships and significant mental health problems [46,133].

DISCUSSION

The aim of this study was to provide an overview of characteristics of AGRC. By reviewing the literature, features AGRC present in different areas and through time were identified. This overview of issues identified in the literature on AGRC offers insight in the nature and extent of difficulties they encounter, and several suggestions are possible concerning the organization and implementation of care.

From a biological perspective, we found several mutually reinforcing risk factors, including a high prevalence of psychotropic and non-psychotropic drug use, along with frequent chronic physical health issues and psychopathology. Trauma and abuse history, along with attachment style, seem important characteristics in the psychological functioning of AGRC. Concerning social factors, several characteristics of AGRC are identified considering family profile (low socio-economic status, high parental psychopathology, complex family composition), social functioning (poor peer relations), and trouble in school and leisure time and services use (frequent contacts with justice and prior placements). Moreover, while some characteristics are limited to a certain period in the care trajectory (e.g., peer victimization, described mostly during the stay), other characteristics persist throughout the trajectory (e.g., risk of low socio-economic status).

Clinical implications

Cross-sectoral collaboration, with particular attention to continuity in care, and individualised care delivery, are central concepts to ameliorating care delivery for AGRC.

As no one agency can be expected to handle the multitude of difficulties these girls encounter, interagency collaboration is an important tool to overcome fragmentation and fill in the multiple and complex needs of these AGRC [1,5].

AGRC are found to have vulnerable physical and mental health statuses, with mutually reinforcing physical and psychosocial problems [27,14], but not to receive adequate mental health care [35]. Organizational and professional separation between social and health services, poor liaison and inadequate communication [134] result in a failure of information exchange and thus a lack of referral for young people [135] and shortages in care [136]. Rapprochement of the professions and institutions might be able to reduce the reluctance and fear of stigmatization of young people in residential care institutions to become involved with the child and adolescent psychiatric services [8]. More intensive collaboration between Child Welfare and Mental health

services is shown to improve the mental health outcomes for youths [137,138]. Also, good coordination of medical data and communication between services can avoid parallel treatments or medical shopping [139,140].

As presented above, AGRC have needs on various domains, so that besides adequate (mental) health care and a safe and stable living environment and support in building a social network and enhancing independent living skills, there are also educational needs, and support is needed in structuring leisure time activities and providing legal advice. Therefore, 'broadening' the collaboration to include, besides Child Welfare and the Mental health sector, also schools, youth justice institutions, and leisure time centers seems important in the service provision for this population [8,141].

Interagency collaboration also provides better conditions to ensure continuity of care [142]. In light of the detrimental effects of placement changes and treatment discontinuity, stopping the instability that exists in nearly all life domains of these youths, and providing a maximum of continuity in care [16] should indeed be the focus of interventions. Better collaboration between services could overcome the diffusion of responsibility and premature termination of treatments ('passing the buck') hence enhancing the continuity of care [16,143,144]. Few researchers have systematically studied the specific needs of this population at discharge, but the importance of aftercare, defined as services to maintain gains following departure from out-of-home care, is highlighted in the literature and is an important challenge for clinical practice [46,60,132,145].

A focus on societal integration is very important for these AGRC. Enhancing family involvement and support in building a social network ameliorate mental health and educational outcome [44,46,113,114]. Assisting youngsters in residential care with their academic learning by providing personalized support enhances job opportunities and social insertion [132,146]. The literature also suggests leisure-time holds important benefits for youths in residential care [103], and therefore recreational activities should be implemented in the care programmes [57,108].

Research recommendations

There are difficulties surrounding the literature on residential care with a general dearth of data [147], partly because epidemiological studies often restrict their research to children and adolescents living with their biological parents [8,148]. Also, comprehensive and standardized program descriptions are needed to improve research on residential care programs [149-151]. Agency-based studies, including research partnerships with families and residential staff [152], can provide valuable ideas about clinical process needs and facilitate effective implementation of care [153].

Also, we found mainly risk factors and descriptions of problems, with only a few authors mentioning positive characteristics for AGRC [144]. For example, in the study of the QOL of youths in residential care, positive indicators, such as life satisfaction, have largely been excluded [154]. Several models of resilience exist and various authors have, to some extent, studied this concept in the context of residential care [109,146]. Studying

positive and protective factors will be important to inform clinical practice and should become an integrated element of care delivery planning and future research.

Limitations

A literature overview of this type is inevitably restricted by various limitations, notably the lack of a universal definition of the concept of residential care. Additionally, because the child and youth welfare services are different in every country and are influenced by the broader social, economic, and political context in which they exist, it is difficult to generalize the findings of studies carried out in one specific setting [8,105]. Nevertheless, these broad insights into characteristics of AGRC offer a frame for research, policy and practice.

CONCLUSIONS

AGRC present a complex interplay of strengths and risk factors throughout their care trajectory. Cross-sectoral collaboration, with particular attention to continuity in care and to the specific needs of subgroups of adolescents, seem cornerstones ameliorating care delivery for AGRC. Further research, taking into account the systemic complexities of the needs and protective factors of adolescents in residential care and the interwoven BPS characteristics acting upon the intervention process, is warranted.

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