Outreach interventions for difficult-to-engage adolescents with mental health needs

A NARRATIVE REVIEW ON BEHALF OF
THE CHILDHOOD DEVELOPMENT INITIATIVE

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Executive Summary

Adolescents are a particularly vulnerable group with mental health needs that often go untreated. In the Tallaght region a cohort of up to 1500 12-18 year olds has been identified with unmet mental health needs. In many cases this unmet need is due to insufficient capacity within services, however in some cases, it is due to youths not engaging with any services. The purpose of this review is to identify potential outreach solutions for 'hard-to-reach' youth who are not engaging with any service.

A selective narrative review methodology was applied. A total of 30 papers were included in the final review describing the following 5 intervention types: 1) Mobile outreach or home visitation programmes, 2) Incentivised outreach through social media, 3) Moderated online social therapy, 4) School outreach clinics and 5) Rapid access youth service hubs.

Because of the nature of the inclusion criteria; in particular 'mild to moderate symptoms' teamed with 'difficult to engage youth', the phenomenon of 'youth social withdrawal' emerged as an important area for consideration in this review. A socially withdrawn youth, is a child, adolescent or young adult who voluntarily retreats into their own home for long periods (3 months or longer), refusing to go to school and avoiding social situations and connections. The occurrence of socially withdrawn youth is not well studied in Ireland however the InBetweeners report uncovered behaviors described within the phenomenon in other countries such as youths staying in their rooms, school refusal, internet addiction and youths living in a virtual world.

Exemplar programmes within each intervention type were identified. Two of these emerged from the exploration of youth social withdrawal outreach interventions and are; *The Home Visitation Program Korea* a home outreach initiative in which socially withdrawn youth are assessed and treated in their own homes and an *Incentivised social withdrawal assessment* distributed through Chinese social media platforms Weibo, WeChat, and Wandianba. Three further exemplar interventions identified; *Entourage* a youth-focused, clinician moderated, online therapy and social networking intervention for social anxiety; *The Missouri Bridge Program* a psychiatric school outreach clinic providing mental health assessment, referral and medication management services in school buildings; and *Jigsaw's brief intervention programme* a youth-focused 6 week assessment and therapeutic programme delivered in a youth friendly setting in the community.

A comparison of interventions was beyond the scope of this review. The information presented in presents a good starting point for consideration of an appropriate outreach intervention for 'hard to reach youth' in the Tallaght region who are not engaging with any service.

Introduction

Despite progress in the development of evidence-based interventions for youth mental health, international evidence suggests that up to 75% of youths with mental health needs never receive services[1]. Ireland's Children's Mental Health Coalition published a review in 2014[2], which identified that shortages in Child and Adolescent Mental Health Services (CAMHS) resourcing that existed in 2006's Vision for Change policy review[3] persisted in 2014. Even with the welcome establishment of Jigsaw's youth-focused, integrated mental health hubs, the treatment gap persists. A recent study[4] conducted by Trinity College Dublin(TCD) on behalf of the Childhood Development Initiative(CDI) has identified a cohort of up to 1500 12-18 year olds with unmet mental health needs in the Tallaght region.

In many cases this unmet need is due to insufficient capacity within services[4]. In some it is due to youths not meeting access criteria or having more than one modality of mental health need and therefore an unclear referral path[4]. In some cases, the young people and/or their families are not engaging with any agency. These young people come to the attention of service providers through family member, service provider, GP, youth worker or school personnel who are concerned about internalizing and isolating behaviours such as school refusal, excessive gaming and/or externalizing behaviours such as aggressiveness, verbal abuse and threats of violence.

An outreach intervention to engage and provide support to this hard-to-reach cohort is needed to help manage symptoms and where possible to prevent symptoms from worsening until such time as they gain access to other services or recover. This gap was highlighted by the strategic planning focus group of local service providers in Tallaght. The purpose of this review is to inform the selection of such an intervention in the Tallaght region.

Specifically the aim of this narrative review is to identify potential outreach interventions to manage or alleviate moderate symptoms of mental health disorder and/or behavioural and emotional disorder in 12-18 year olds who are not engaging with any service.

Method

A selective narrative review methodology[5 6] was applied. In this method a selective sample of papers was gathered using a systematic approach to answer the research question in a way that provides an overview of the current intervention options as well as a detailed look at relevant examples. It was necessarily deductive.

Definitions

For the purposes of this review the following definitions will apply.

An Intervention is defined as any facility, service or activity which aims to engage, manage or alleviate moderate mental health disorder and/or behavioural and emotional disorder in 12-18 year olds who are not engaging with services.

Outreach care means that health workers see young people in their homes or other community settings.

Moderate mental health disorder is defined as the presence of abnormalities of behaviour, emotions or relationships of sufficient severity to require professional intervention which may not be a psychiatrist and includes anxiety, depression, conduct disorder and emotional and behavioural disorder.

Externalising behaviours are defined as maladaptive, disruptive behaviors directed toward an individual's environment, which cause impairment or interference in life functioning and can include aggressiveness, verbal abuse and threats of violence.

Internalising behaviours are defined as maladaptive ways in which individuals keep their problems to themselves, internalising them and can include withdrawal, isolation, school refusal and loneliness.

Search strategy

The following two sources of material were investigated.

1. Peer-reviewed publications, published in English from MEDLINE, Embase, Psychinfo, Cinahl, ProQuest, Sociological abstracts, Family and Society Plus, Meditext, and all Evidence Based Medicine (EBM) Reviews. Dublin City University Library was used to search multiple databases simultaneously except for The Campbell Collaboration and the Cochrane library, which were searched directly. Journals were searched from earliest issues available on DCU database (usually first issues) to October 2020.

The following list of inclusion and exclusion criteria were applied

Inclusion criteria

- Interventions aimed at engaging and treating hard-to-reach youths with mental health needs
- Interventions which include a component of outreach to youths with unmet mental health needs
- Interventions aimed at treating difficult to engage youths with anxiety and/or depression
- Interventions aimed at treating difficult to engage youths with emotional and or behavioural disorders
- Interventions aimed at 12-18 year olds

Exclusion criteria

- Interventions aimed at promoting better mental health of young people
- Interventions aimed at preventing the development of ill mental health
- Interventions aimed at improving existing services
- Interventions aimed at improving referral pathways
- interventions aimed at improving communication on service options
- Large scale models of mental health service delivery
- Interventions targeting under 12s or over 18s
- Interventions developed for low- and middle-income countries

Searching and shortlisting

Initial searches used different combinations of the following search terms: *youth, adolescent, mental health, intervention, outreach, difficult to engage, engaging, socially withdrawn*. In these initial searches, titles including the following terms emerged: *community, GP, school and mobile phone*. A further round of searching was conducted using a combination of these new terms and the original terms i.e. *youth, adolescent, intervention, mental health, outreach, difficult to engage, engaging, socially withdrawn, community, GP, school and mobile phone*. This yielded a large number of results (>100,000). Results were sorted by relevance and a read of titles was conducted.

From title reads, excluding papers based on exclusion criteria yielded 54 results. Many more studies than this existed but once the same intervention type appeared several times and no new intervention types were appearing in the search results, the search was stopped. At this stage results were grouped into categories as follows:

Table 1: First grouping of search results

	Category
1	Youth assertive community treatment
2	Community outreach programmes
3	Family support programmes
4	Mobile youth outreach (IMYOS, Psymobile)
5	Engagement through mobile phones
6	Rapid access youth service hubs
7	School outreach programmes
8	Social Withdrawal / Hikikmori interventions
9	Family and systemic treatment
10	Adolescent mentalization based integrative therapy AMBIT

Further shortlisting based on a read of abstracts and a search for further related papers based on citations and emerging categories and consultation with the second reader yielded 36 results and the papers were regrouped into the following categories:

Table 2: Second grouping of search results Category

	Category
1	Assertive Community Treatment (AST)
2	Intensive Case Management (ICM)
3	Intensive outpatient/outreach and mobile outreach services
4	Adolescent Mentalisation-based integrative therapy (AMBIT)
5	Multisystemic Therapy (MST)
6	Systemic family Therapy
7	Home-based crisis teams
8	Home visitation programmes for socially withdrawn youths
9	School outreach clinics
10	Rapid Access youth service hubs such as Jigsaw
11	Engagement through mobile phones

Following full read of papers and further consultation with the second reader a number of categories were removed. The following table, table 3 provides a summary of which categories were removed and why.

Table 3: Categories removed during full read of papers Category Removed /Retained Reason

	Category	Removed / Retained	Reason
1	Assertive Community Treatment (AST)	Removed	Designed for individuals with severe and complex mental health needs such as schizophrenia, psychosis, autism
2	Intensive Case Management (ICM)	Removed	Designed for individuals with severe and complex mental health needs such as schizophrenia, psychosis, autism
3	Intensive outpatient/outreach and mobile outreach services	Retained	Merged with category 8 'Home visitation programmes'
4	Adolescent Mentalisation-based integrative therapy (AMBIT)	Removed	Designed for individuals with severe and complex mental health needs such as schizophrenia, psychosis, autism
5	Multisystemic Therapy (MST)	Removed	Designed for youths involved in criminal behaviour
6	Systemic family Therapy	Removed	While therapy can happen in youth's home, this intervention is not designed as outreach but rather an add on to individual therapy when indicated
7	Home-based crisis teams	Removed	These services are provided for over 18s
8	Home visitation programmes for socially withdrawn youths	Retained	
9	School outreach clinics	Retained	
10	Rapid Access youth service hubs	Retained	
11	Engagement through mobile phones	Removed	These interventions are focused on retention of youths in treatment once treatment has begun

This left the following five categories and 13 papers for the final selection. A detailed review was conducted of the final selection. The final selection represents the studies with the best contribution relative to the research question.

Table 4: Final categories following full paper reads Category

	Category
1	Mobile outreach/home visitation programmes
2	Incentivised outreach through social media
3	Moderated online social therapy
4	School outreach clinics
5	Rapid Access youth service hubs

Analysis

In the analysis of papers selected for the final review the following information was extracted for each intervention type: an overview including key characteristics, strengths, weaknesses and a description of the chosen example intervention.

Limitations

- This review does not include a critical appraisal of papers included.
- This review does not include an exhaustive list of all adolescent mental health outreach interventions, however the interventions identified represent the most relevant interventions found using the defined search criteria.
- A comparison of interventions identified was beyond the scope of this review.

Discussion

Five relevant intervention types were identified in this review. They each have an outreach element and target mild to moderate youth mental health needs. The intervention types identifies are: 1) Mobile outreach or home visitation programmes, 2) Incentivised outreach through social media, 3) Moderated online social therapy, 4) School outreach clinics and 5) Rapid access youth service hubs. An overview, example intervention and a summary of strengths and weaknesses is provided below for each of the five interventions identified.

Because of the nature of the inclusion criteria; in particular 'mild to moderate symptoms' teamed with 'difficult to engage youth', the phenomenon of 'youth social withdrawal' emerged as an important direction for consideration in this review. For this reason, a brief overview of youth social withdrawal is also included here in the findings section.

Youth Social Withdrawal – An Overview

A socially withdrawn youth, 'hidden youth' or a hikikomori is a child, adolescent or young adult who voluntarily retreats into their own home for long periods (3 months or longer), refusing to go to school and avoiding social situations and connections [7 8]. Onset is usually between 15 and 19 years old and sufferers are predominantly male [9]. Socially withdrawn youth may value the virtual world above reality and have social contact predominantly via the internet [8 9].

The phenomenon of socially withdrawn youth is conceptualised differently in different cultures. It is generally not well classified as a syndrome and seen more as a symptom[10]. No specific studies on youth social withdrawal in Ireland could be found during this review, however the qualitative arm of the InBetweeners report[11] highlighted youth behaviours which have been identified in other countries as being part of the phenomenon. Under the theme 'social anxiety' service providers highlighted challenges with difficult-to-engage youth, who stayed in their homes or in their rooms. Anxiety, gaming, internet addiction and youths 'living in a virtual world' were highlighted by service providers in the context of the 'school refusal' theme.

Developmental theories for youth social withdrawal have centred on insecure attachment and unresolved psychosocial crisis with factors such as overdependent parenting, family dysfunction, school bullying, internet addiction and societal pressure to succeed also found to contribute[9]. The different conceptualisations of the phenomenon have led to the development of many different types of interventions. Most commonly a combination of individual psychotherapy, family interventions and facilitated social activities or social groups are used to rehabilitate the youth and reactivate social contacts[9 12]. In some cases, pharmacotherapy and the intervention of social services is needed. In some cases, other psychiatric disorders e.g. schizophrenia or mood disorders are diagnosed[13] although the Japanese definition of Hikikomori excludes youths with any other serious psychiatric diagnosis and it is important to note that in many cases there is no specific diagnosis other than 'socially withdrawn'[7]. This makes accessing services challenging in countries where the phenomenon is not well understood, an issue that was raised by service providers in the InBetweeners report[11].

In studies of treatment preferences of socially withdrawn youth's, the vast majority express a desire for treatment[8]. Despite this they delay help seeking because of social anxiety and avoidant coping[9]. Their families may also delay help seeking to avoid stigma [9] and gaining therapeutic access has been cited as one of the main challenges in the treatment of socially withdrawn youth[10 12 13]. 'The establishment of a contact may represent the final aim of many months of intervention, and the attempts by an individual clinician or an attending team may not necessarily have a positive outcome' [12].

The emphasis in this review is on outreach and engagement interventions. Two interventions were found in this review for socially withdrawn adolescents which had an explicit emphasis on outreach. These are mobile outreach or home visitation programmes and incentivised outreach through social media.

Mobile outreach/Home visitation programmes

Home visitation programmes or mobile outreach services are services that provide home visit assessment and counselling, in their own home, to youths experiencing social withdrawal and/or other moderate mental health symptoms . Youths do not have to be in crisis or be demonstrating any symptoms other than social withdrawal and referrals can be made by family members, service providers, GPs, youth workers, counsellors or school personnel. Depending on the intervention, treatment is provided by specially trained social workers or psychiatrists. Some youths treated through mobile outreach programmes were not previously in receipt of any services before being approached through the mobile outreach programme[13].

Strengths

- Youths who may not be willing to leave their homes or rooms can receive treatment
- Youths do not have to be showing any symptoms other than social withdrawal to receive treatment
- Some hidden youths may not otherwise be in receipt of any support

Weaknesses

- Even following referral, attempts to gain therapeutic access can be unsuccessful
- Very little evidence has been published on these types of interventions

Example – Home Visitation Programme Korea

This review identified two mobile outreach services for socially withdrawn youth which had a peer-reviewed evaluation. One of these, a French model, called Psymobile[13], where treatment is provided for as long as needed by psychiatrist teams, fit all the criteria for inclusion except age, it was geared towards young adults. The other is a home visitation intervention tested in Korea[10]. It was the only one which met all the inclusion criteria and is taken as our example intervention.

This intervention called simply the Home Visitation Program is designed to detect, evaluate and treat socially withdrawn youth and is executed by social workers who have been specially trained. A manual, designed by child and adolescent psychiatrists, guides treatment visits and contains different sections to be utilised by patients, case workers and parents. It is intended to provide 5, home-visit counselling sessions, though an average completion rate of only 2.8 sessions was achieved in the evaluation. While some youths refused access or were uncooperative during sessions, average Global Assessment Functioning (GAF)[10] scores increased significantly after the program (44.6 [SD = 11.1] vs 53.4 [SD = 13.2]; $P < 0.001$;). However, 48.8% of the SWY showed no change in GAF score. Approximately half of youths showed improvement in one or more of the behavioural outcomes including increased family conversation, increased outdoor activities, increased interpersonal relationships, increased participation in group activities, returning to school and/or acquiring part time work.

Incentivised outreach through social media

With mobile outreach or home-visitation interventions, access is only initiated through a referral and some hidden youth still may not be identified. Research into socially withdrawn youth has highlighted the need for innovative ways of proactively reaching sufferers, such as through social media, by phone or email to build therapeutic trust and initially using online treatment modalities to build confidence[9]. Incentivised social media outreach interventions seek to engage and assess socially withdrawn youth directly using ads and user-to-user sharing on social media platforms where socially withdrawn youth are likely to be active.

Strengths

- Youths who may not have be identified through any other means, such as referrals, can be uncovered
- Youths can be engaged within the social spaces they are most comfortable
- Direct costs of the intervention are low

Weaknesses

- This intervention did not include any treatment or onward referral
- Evidence is based on only one study

Example – Incentivised SWY Web Survey China

The example intervention[14] was a targeted, incentivised web survey. It was distributed, using ads, through social media platforms where it was hypothesised that socially withdrawn youth, in 3 metropolitan cities in China, would be spending time. The platforms were Weibo, WeChat, and Wandianba, a social networking gaming website.

Despite a small number of completed surveys (137), the intervention managed to identify 29 socially withdrawn youths (13 physically withdrawn youths, 7 asocial youths, and 9 youths which would be classified as hikikomori or fully socially withdrawn youths). The intervention findings provide useful guidance on ways to reach more youths in future for example using predominantly gaming sites and harnessing the popularity of existing user accounts with large numbers of followers to share the survey. The number of youths accessing the social media sites or the number of youths who would have seen the ads for the survey over the course of the intervention was not reported. According to the 2010 census data, the population aged between 10 and 39 years in the 3 cities is 28 million.

This intervention did not fully meet the inclusion criteria for this review because no treatment or referral was offered to the socially withdrawn youths who were identified. Instead, at the end of the questionnaire, a message containing contact information and numbers for crisis intervention hotlines of local nongovernmental organisations offering mental health services in the 3 cities was provided to the respondents to encourage them to seek help if needed. It was included in the review, despite this, as it may represent one of the few ways to uncover particularly difficult to reach socially withdrawn youth. As there was is no treatment element it is recommended that this outreach intervention be considered as add-on to a treatment intervention.

The survey inquired about (1) physical isolation or withdrawal to a particular place, (2) lack of social connectedness and interaction, and (3) duration of social withdrawal. Participants were assigned to the withdrawal group (only meeting criteria 1 and 3: staying at home almost every day for more than 3 months), the asocial group (only meeting criteria 2 and 3: persistently avoiding social interaction for more than 3 months), or the *hikikomori* group (meeting all 3 criteria). Participants who did not meet any of the 3 criteria were assigned to the comparison group. Once the respondents finished the questionnaire, they were given a chance to enter a lottery for a CNY ¥500 (US $77.44) cash coupon. The direct costs of the intervention were relatively low at approximately $1000.

Moderated Online Social Therapy (MOST)

Almost all young people have at least one active social media account, with over 70% using social media multiple times a day—a rate that has doubled between 2012 and 2018[15]. Increasingly, individuals with mental illnesses are turning to social media to talk about their illness experiences, seek advice and learn from and support each other[16]. A growing number of online peer support groups and social networking sites (SNS) exist and overall, the evidence suggests that these groups can foster a sense of social connectedness, empowerment, and improved quality of life as well as reduce depression and emotional distress if moderated by professionals[15]. To improve access and treatment engagement for hard-to-reach youths, a new moderated social therapy model has been developed which combines interactive user-directed online therapy; clinician and peer moderation; and peer to peer social networking[15]. The model is called the Moderated Social Therapy Model and was first developed in Australia in conjunction with The University of Melbourne and Head Space youth service hub.

Different adaptations of the model have been developed for clinical risk of psychosis, suicidal risk, depression, and social anxiety, as well as for relatives of young people with psychosis and depression. An enhanced version of the model which is called MOST+ includes real-time, clinician delivered web-chat counselling has been developed. Evaluations to date have consisted of single group, pre and post studies. Significant improvements in psychological distress, perceived stress, psychological well-being, loneliness and social support in participants have been reported[15]. The state wide roll out of the facility has been expedited in Victoria by the Australian government in response to the restrictions in face to face services caused by the covid 19 epidemic.

Strengths

- Multiple lines of support are available to youths within the one intervention
- The social aspect of the platform builds social interactions and connectedness
- Reported to be scalable by its developers
- Single group evaluations show promising results
- Anonymity for users

Weaknesses

- Single group uncontrolled evaluations only to date (randomised controlled trials underway)
- Cost effectiveness has not been established

Example Entourage Australia

The MOST intervention which is most relevant to this review is a program called Entourage. It is youth-focused, geared towards sufferers of social anxiety and is designed with a focus on engagement of young males[17].

Entourage incorporates online social networking with a "Wall" feature, similar to other social networking sites, where participants can "post" and interact with others. It includes interactive psychosocial interventions, delivered in the form of personalised comics. Modules are delivered in "Steps", each targeting an aspect of cognitive therapy for social anxiety (such as cognitive restructuring and reducing safety behaviours.). There are "Talking Points" where youths are prompted to discuss scenes depicted in the comic with each other and "Actions" also accompany participants can try out in the real world to improve social functioning. Entourage also incorporates a "Talk it Out" feature, where users can post their own challenges. Moderators then support through a problem-solving style discussion, designed to help users help each other and learn from their shared challenges.

To support engagement, Entourage uses moderation from clinicians with significant experience treating mental health concerns of young people. Gender-sensitised strategies can be incorporated, to boost engagement among young. These included solution-focused questioning; applying an action-orientation and structured therapy designed to reach a clear solution; use of accessible language and minimising jargon; and normalising the experience of mental ill-health among young male participants. Young people with a lived experience of social anxiety provide online peer support to help youths feel more comfortable on the system.

School Outreach Clinics

School outreach clinics provide free mental health services to school children on school grounds. The goal of school outreach mental health services is to remove barriers for youths in accessing mental health such as parents' lack of knowledge about available services, long wait times, lack of transportation, high cost of services and scheduling difficulties[18]. Outreach is achieved as services are made available to youths in familiar surroundings where they already spend considerable time. There is some evidence to suggest that youths from lower socio-economic backgrounds may be more likely to access services through schools than at other community and clinical settings[18].

In the UK 70% of secondary schools offer counselling services to their pupils and evidence suggests that the availability of school-based counselling services is increasing over time[19]. There has been a significant move away from school staff, for example, teachers, doing counselling training as an add-on to their role towards qualified counsellors (a professional practitioner who has typically completed a two year part-time/ one year fulltime diploma)[19].

In the US, public schools have become the main provider of behavioral health services to children in the United States and are responsible for approximately 70-80% of all behavioral health services delivered to children[20]. 84–87% of schools provide assessment, behavior management consultation, crisis management, and referrals to specialist mental health services. 34% of schools provide medication and medication management. Among the schools providing mental health services, 96% have at least one mental health service provider (counselors (77%), nurses (69%), and psychologists (68%), psychiatrists (2%).

In Ireland, school guidance counsellors provide counselling services to children with an emphasis on personal problems, social skills, education and career planning. School guidance counsellors and teachers in Ireland are supported on a consultative basis by the National Educational Psychological Service (NEPS). The emphasis in treatment is on outcomes of progressing with schoolwork and positive school behaviour, on school-based problems as opposed to individual problems with mental health. Budget cuts in 2012, in the aftermath of the economic recession, have seen a reduction in guidance counselling services in schools. Guidance posts are no longer allocated per student number (previously one 22h post per 500-799 students) and now most guidance counsellors also perform teaching duties[21]. This review did not find evidence of any school outreach clinics with professional psychology or psychiatric services that had been tested in an Irish setting.

One initiative was found in this review which aimed to provide free, psychiatric assessment, medication and referral services to children and adolescents within school buildings as an interim solution. The service is delivered by psychiatrist and psychiatric nurse professionals in coordination with school personnel and provides youth with assessment, prescription and referral to a community provider. It is called The Bridge Program and is described as our example intervention.

Strengths

- Youths receive services in familiar settings where they habitually frequent
- Potential barriers to access such as parental lack of knowledge and lack of transportation are overcome
- Youths in need can be seen in shorter timeframe and stabilised while they await other services
- School personnel can contribute to ongoing support and monitoring of youths
- Youths from families of low socioeconomic status may be more likely to access services through schools than at other settings

Weaknesses

- Dependent on collaboration with school personnel
- School refusing children may not benefit from this form of outreach
- Not many evaluations of this type of intervention have been published

Example - The Bridge Program Missouri

The Missouri Bridge Program[18] provides mental health assessment, referral and medication management services to 23,000 students across 52 school buildings. The goals are; to reduce the 8 week wait time from referral to evaluation experienced by youths within community services; to stabilise children and to ensure a ‘warm handoff’ to community services. During the first 15 months, 394 youths were seen through the program. All were seen within 10 days of referral. The programme is staffed by two psychiatric registered nurse case managers (RN CM) and a part-time child psychiatrist. Assessment of all children referred was conducted by a psychiatrist and a follow up assessment was arranged for all children for 2 to 3 months later. 74% of children were prescribed medications, most were prescribed psychotherapy. Therapy was not conducted by Bridge staff. RN CMs made therapy referrals to community settings (with parental consent) if the youth was not already on a waiting list. RN CMs conducted follow up calls to ensure compliance with

medication regime and to monitor side effects. For high need families, Bridge RN CMs coordinated wrap around services. 67% of children were from families at or below the poverty line.

Rapid access youth service hubs

Rapid-access youth service hubs provide outreach mental health services to adolescents in youth-friendly surroundings within the community[22]. They offer life support and early intervention therapy. They aim for improved access with multiple entry pathways, rapid response (between 72Hrs and two weeks from first contact depending on the model), youth-friendly settings and services and partnership with other social agencies e.g. employment agencies[22].

Research on youth mental health outcomes from youth service hubs is very limited. Evaluations are broad and descriptive in nature, report on short-term effects and do not include comparison groups. There have been no RCTs conducted on any youth service hub services to date. The best currently available data indicate that many young people who may not have otherwise sought help are accessing these mental health services[23] and, taking pre and post evaluations into account, positive outcomes, particularly in psychological distress and psychosocial functioning have been found[22 23]. Some young people, such as those with more severe symptoms and those who attend fewer treatment sessions fail to benefit[23]. Limited service availability and workforce shortages are challenges identified for this delivery mechanism[22].

Strengths

- Rapid access
- No entry criteria
- Multiple routes in, including self-referral
- Youth friendly setting and youth focused interventions
- Improvements in psychological distress and psychosocial functioning for mild to moderate symptoms

Weaknesses

- No controlled trials yet
- Not suitable for youths with severe symptoms
- Limited service availability may hamper rapid access goals and limit duration of treatments

Example Jigsaw's brief intervention programme

Exemplar interventions include Headspace in Australia[24], Forward thinking Birmingham in the UK[25], Youth One Stop Shops in New Zealand[26], Open Access in Canada[27] and Jigsaw in Ireland[28]. None of the published reviews of the models compare efficacy of interventions from the different centres. In this case, the brief interventions program of the Irish initiative Jigsaw was selected as the example for this delivery mechanism.

Jigsaw is focused on prevention and early intervention services aimed at young people with mild to moderate mental health symptoms. Based on ecological systems theory, the model considers the young person's whole social environment including family, friends, school, the neighbourhood and services

that surround the young person[29]. Jigsaw aim to intergrate supports and services for young people and provide holistic care. Jigsaw's brief interventions program includes a mental health assessment and up to 6 therapeutic sessions. Trained professionals support young people over the 6 sessions to work through issues and arrive at goal plans. The most common focus of goal plans is on emotional, cognitive and behavioural self-regulation and CBT is usually provided within the sessions. Goal plans focused on family issues, peer relationships, living skills and physical health show good goal attainment results. Lower levels of goal attainment are seen in areas such as housing, employment, problem solving and conflict management. Multiple referral sources including self-referral are accepted and no clinical diagnosis is required[30]. Considerable improvements in psychological distress have been measured after Jigsaw's brief intervention programme using the Young Person (YP) - Clinical Outcomes in Routine Evaluation(CORE) psychometric scoring system[28]. No controlled trial of the intervention was found in this review. At the end of the six sessions almost 70% of young people are not referred on to other services as their needs have been met. 30% are still in need and referred on, mostly to primary care and CAHMS[28].

As jigsaw is an existing service with a presence in the Tallaght area, the recommendation in this case would be to partner with Jigsaw to extend services to cover unmet needs of youths identified in the inbetweeners report as opposed to implementing or establishing a new facility.

Conclusion

This review provides an overview of different potential interventions that currently exist for the delivery of outreach mental health services for difficult to engage adolescents. The intervention types identified are mobile outreach or home visitation programmes (example The Home Visitation Program Korea) , Incentivised outreach through social media (example An Incentivised Social Withdrawal Assessment), moderated online social therapy (example Entourage), school outreach clinics (example The Missouri Bridge Program) and rapid access youth service hubs (example Jigsaw's Brief Intervention). A comparison of interventions was beyond the scope of this review. The information presented in presents a good starting point for consideration of an appropriate outreach intervention for 'hard to reach youth' in the Tallaght region who are not engaging with any service.

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