Journal of Child and Adolescent Psychiatric Nursing

Journal of Child and Adolescent Psychiatric Nursing ISSN 1073-6077

Facilitating Access to Effective and Appropriate Care for Youth With Mild to Moderate Mental Health Concerns in New Zealand

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Search terms:
Adolescent, healthcare quality access and evaluation, indigenous population, minority health, primary mental health, socioeconomic factors

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Conflict of interest: The authors report no actual or potential conflicts of interest.

doi: 10.1111/jcap.12095

PROBLEM: Youth with mild–moderate mental health concerns often go unrecognized, and find access to and the navigation of support services difficult.
METHODS: A quasi-experimental pre-/postintervention design was used to explore the impact of facilitated access to free counseling support using the following outcome measures: Strengths and Difficulties Questionnaire (SDQ), Substance Abuse Choices Scale (SACS), Children's Global Assessment Scale (C-GAS), alongside consumer feedback questionnaires.
FINDINGS: A total of 581 culturally diverse youth aged 10–24 completed the intervention. Those who completed reported significant improvements in global social and psychiatric functioning measured by C-GAS ($p < .001$); reduced risk of clinically significant mental health concerns measured by SDQ ($p < .001$); and reductions in the use and impact of drugs/alcohol measured by SACS ($p < .001$). Participants and their families/whānau reported that the interventions were safe and appropriate, with perceived increased skill development around coping and communication.
CONCLUSIONS: This intervention appears to be an effective and acceptable strategy, particularly for Māori youth and those from lower socioeconomic groups, to reduce mild to moderate mental health symptoms and concerns. This approach could be replicated by other communities wishing to reduce mental health burden for youth by facilitating access to free, culturally appropriate, and accessible counseling via a multidisciplinary and collaborative triage approach.

Approximately one in every five adolescents will suffer from a recognized mental health disorder each year, in most developed nations (Costello, Mustillo, Erkanli, Keeler, & Angold, 2003; Fergusson, Horwood, & Lynskey, 1993; Fortune et al., 2010; McGee et al., 1990; Patel, Flisher, Hetrick, & McGorry, 2007). In New Zealand, Māori (the indigenous peoples of New Zealand) and those from socioeconomically deprived families are disproportionately affected (Baxter, Kingi, Tapsell, Durie, & McGee, 2006; Baxter, Kokaua, Wells, McGee, & Oakley Browne, 2006; Clark et al., 2011; Clark, Robinson, Crengle, Herd, & Grant, 2008; Crengle et al., 2013; Fortune et al., 2010; Green, McGinnity, Meltzer, Ford, & Goodman, 2005). Mental health disorders during adolescence can be associated with a range of negative outcomes, including risk of later major depression, anxiety disorders, nicotine dependence, alcohol abuse or dependence, suicide attempt, educational underachievement, unemployment, and early parenthood (Fergusson, Horwood, Ridder, & Beautrais, 2005; Fergusson & Woodward, 2002; Kim-Cohen et al., 2003). There is growing evidence that early intervention during adolescence can be associated with reduced severity of symptoms and improved adult mental health outcomes (Chanen et al., 2009; Durlak & Wells, 1997; Leavey, Flexhaug, & Ehmann, 2008; Shochet & Hoge, 2009).

Given that approximately three-quarters of adults with psychiatric disorders present before the age of 18 years (Fergusson et al., 2005), screening, identification, and early treatment of mental health disorders (Durlak & Wells, 1997; Leavey et al., 2008; Merry & Spence, 2007; Shochet & Hoge, 2009) in adolescence may help to reduce the mental health burden among vulnerable populations.

The U.S. Surgeon General stated that "Children and families are suffering because of missed opportunities for prevention and early identification, fragmented services, and low priorities for resources" (U.S. Public Health Service, 2001). In New Zealand, little is known about the referral and management of adolescents with mild to moderate mental health concerns in primary care and community settings. Barriers include the lack of opportunistic screening for mental health concerns among young people in primary care settings and the lack of recognition of mental health problems (Higgins, 1994; Johnson, Harris, Spitzer, & Williams, 2002; MaGPie Research Group, 2005; Richardson, Keller, Selby-Harrington, & Parrish, 1996). In addition, many clinicians who identify emerging mental health symptoms among their adolescent population reported a lack of confidence to refer, treat, and manage these concerns (Costello, 1986; MaGPie Research Group, 2005; Olson et al., 2001). Young people are often hesitant to engage in mental health services (French, Reardon, & Smith, 2003; Harrison, McKay, & Bannon, 2004; Owens et al., 2002), with indigenous youth and those from lower socioeconomic groups more reluctant (Curtis, 2010; Jansen, Bacal, & Crengle, 2008; Wilson, 2007). Researchers have identified a wide variety of individual factors that serve as barriers for young people trying to access mental health services. These barriers include the young person's perception that there is nothing wrong, or that nothing will help (Vanheusden et al., 2008), a lack of knowledge about where to access help (Coggan, Patterson, & Fill, 1997), and for Māori youth, cultural fit barriers (Jansen et al., 2008). Structural barriers, including socioeconomic barriers, have been identified by a number of studies as a significant factor in reducing access to mental health care (Flisher et al., 1997; Sareen et al., 2007), along with perceptions of discrimination by health professionals (Crengle, Robinson, Ameratunga, Clark, & Raphael, 2012). New Zealand's high mental health burden and youth suicide rate relative to similar nations (Clark et al., 2013; Fleming et al., 2013; Ministry of Health, 2014; Ministry of Youth Development, n.d.) suggest that there are significant opportunities for early intervention (Bower, Garralda, Kramer, Harrington, & Sibbald, 2001; Higgins, 1994; Mental Health Commission, 2012; Olson et al., 2001).

Objectives

The objectives of this paper are to: (a) describe the development of an intervention initiated by primary care to facilitate access to services for adolescents with mild to moderate mental health problems; (b) report various clinical outcomes measures pre- and postintervention, and (c) describe consumer feedback for those who completed the intervention.

Background

The high prevalence of mental health distress among young people and corresponding lack of accessible mental health services for those with mild to moderate mental health concerns (Burgess et al., 2009) was the impetus for developing the "Your Choice" program (HealthWest PHO, 2008). A steering group was established consisting of representatives from youth health services, nongovernmental organizations (e.g., Māori and Pacific health- and faith-based social service providers), school-based services, child and adolescent mental health services, and cultural services to develop the intervention.

The Staff

The "Your Choice" program consisted of one paid staff member (coordinator who was a social worker), a multidisciplinary team (MDT) and cross agency triage team (public health nurses [PHNS], general practitioner [GP], public health registrar, psychiatric nurses from Child and Adolescent Mental Health Services [CAHMS], specialist youth health doctor, adolescent nurse specialist, social worker, Tobacco, Alcohol, and Drugs [TADS] worker, and a psychiatrist), and contract counselors/therapists. Counselors were contracted to "Your Choice" with prerequisite recognized counseling qualifications, regular supervision, and expertise working with youth. Counselors ranged in ethnicity, geography, skills, gender, and style of working.

The Funding

The "Your Choice" coordinator and contract counselors were paid for via a grant from the Waitemata District Health Board (WDHB) called Programme Based Marginal Analysis (PBMA) to improve delivery of services to vulnerable populations (Burgess et al., 2009). The multidisciplinary team was a collaboration between the District Health Board (DHB) and the Primary Health Organisation (PHO) to utilize existing clinicians more effectively to triage referrals.

Referral Criteria

This was a referral-based service. Any young person aged 10–24 years who reported mild to moderate mental health concerns was potentially eligible for the study. The exclusion criterion was those who had a serious mental health concern

that met CAMHS criteria. The intervention was free to all participants, and none were required or mandated to participate in the intervention.

The Process

Referrals were received from any primary care organization, schools, and community organizations; secondary services, including self-referrals from family/whānau (whānau is the indigenous Māori word for extended family); and young people within the region. The coordinator made an initial triage to ensure that the referral was appropriate (e.g., not serious mental health concerns appropriate for CAMHS and willing to come to counseling) and had adequate information (e.g., contact details and type of intervention sought) via phone or in person. The MDT then reviewed the referrals based on referral and coordinator's additional information from the initial triage. The MDT then made suggestions with regard to type of therapy/care package (e.g., individual, family therapy, group, or a combination). The counseling providers utilized a range of therapy modalities, including cognitive behavioral therapy (CBT), dialectical behavior therapy (DBT), solution focused therapy, and mindfulness, in a range of settings, including schools, homes, and community-based services that were convenient to the young person. The coordinator then contacted the young person and/or their family/whānau via phone or in person and offered treatment options and discussed preferences, including gender, geographical location, ethnicity preference, and transport issues.

Method

This study utilized a quasi-experimental pre-/posttest method for assessing various well-being outcomes for youth who completed the intervention, alongside consumer feedback. At enrolment, each young person was asked to complete baseline measures of well-being and substance use as measured by the Strengths and Difficulties Questionnaire (SDQ) and Substance Abuse Choices Scale (SACS). Providers were asked to complete the Children's Global Assessment Scale (C-GAS), which produces a Global Assessment of Functioning (GAF) score. All measures were repeated at the completion of the intervention at the final meeting with the contracted provider. Results of these measures were collated from October 2008 to December 2010. Only participants that included both pre- and posttest measures were included in these analyses. The researchers were given a de-identified set of the data once the pre- and posttests had been matched and linked. Anonymous consumer feedback forms were completed by young people and, where appropriate, their whānau/family members, at the conclusion of the interventions and were returned with the completed posttest measures. The consumer feedback was entered separately and not linked with the pre- and posttest data. Ethics was reviewed by the Northern X Regional Ethics Committee and was exempted due to de-identified data.

Measures

The SDQ (11–17 years version) is an assessment of overall psychological functioning, as well as peer problems, emotional symptoms, hyperactivity inattention, conduct problems, and prosocial behaviors (Goodman, 2001; Stone, Otten, Engels, Vermulst, & Janssens, 2010). Validity and reliability have been well established, and the SDQ has been utilized widely in New Zealand. We utilized the SDQ for all participants in the study (10–24 years), acknowledging that the measure was only designed for those aged 11–17 years. This was based on youth expert consultation on appropriate measures for this age group, and that SDQ has been identified as a preferred rating scale among New Zealand young people (Black, Pulford, Christie, & Wheeler, 2010; Fortune et al., 2010; Stasiak et al., 2012). Parental SDQ forms were distributed to caregiver(s); however, very few caregivers were directly involved in the interventions, and there was a very poor response rate. We therefore excluded parental report SDQ from these analyses.

SACS is a valid and reliable scale developed in New Zealand that identifies problems associated with substance use among youth aged 13–18 years (Christie et al., 2007). It appears to be an acceptable screening tool for Māori and Pacific communities. SACS is scored out of a total of 20 and assesses the consequences of the young person's substance abuse along with associated addictive behaviors (Christie et al., 2007). This scale was utilized for all age groups in the intervention (10–24 years). The C-GAS is a valid and reliable measure designed to reflect the lowest level of functioning for a child or adolescent (aged 6–17 years) (Hodges & Wong, 1996; Shaffer et al., 1983).

The C-GAS was originally established for 6–17 year olds, but has been extended to 23 years of age (Schorre & Vandvik, 2004; Weissman, Warner, & Fendrich, 1990). Scores range from 1 to 100, with scores above 70 indicating normal function. This measure has been utilized in New Zealand populations among Māori and Pacific communities (Trauer, Eagar, & Mellsop, 2006), but has not been validated for this population. This scale was utilized for all age groups in the intervention (10–24 years). The consumer feedback questionnaire explored in narrative form the perceived length of waiting period to be seen, counselor performance (ability to develop a therapeutic relationship and provide options for therapy as required), and perceived effectiveness of the intervention.

Analysis

Descriptive statistics were used to report frequencies, means, and medians. Chi-squared tests were utilized to test differ-

ences between characteristics of participants. Paired *t* tests were used to test for differences in individuals' scores at pretest and posttest. Finally, linear regressions were conducted to explore differences between group characteristics, with SDQ, SACS, and C-GAS as the dependent variables, and age, gender, ethnicity, type of care package (individual, group, and family therapy), neighborhood level socioeconomic measure NZDep2006 quintile (Salmond, Crampton, & Atkinson, 2007), and number of sessions completed as the dependent variables. Three separate regression models were carried out for the dependent variables, namely SACS, SDQ, and C-GAS. These models included all the independent variables. A general inductive approach to analyzing the anonymous consumer feedback data was taken (Thomas, 2006). As the consumer feedback was anonymous, no demographic data were collected for participants.

Table 1. Demographic Information of Youth Who Completed ($N = 581$) the "Your Choice" Project Between October 2008 and December 2010, by Gender, Ethnicity, Age Group, and Quintile

		n	%
Gender	Female	311	53.5
	Male	270	46.5
Ethnicity	Māori	182	31.4
	Pacific	56	9.7
	NZ European	297	51.2
	Other	45	7.7
Age group	10–14 years	281	48.4
	15–19 years	248	42.7
	20–24 years	52	8.9
Quintile (where 1 is high and 5 is lower socioeconomic neighborhoods)	1	71	12.3
	2	77	13.3
	3	131	22.7
	4	176	30.5
	5	122	21.1

Results

Demographic Features of Participants

In total, 976 referrals were received during the period of October 2008 to December 2010. Of the 976 referrals, 784 started the intervention while 14.6% of those referred chose not to participate, 2.8% did not meet the criteria, and 2.4% had moved out the area. Of those who started the intervention, 14.5% ($n = 114$) were still in therapy at December 2010 and are therefore also excluded from further analyses. Five hundred and eighty-one of those referred completed the intervention, while 0.5% did not complete the therapy, 7.5% of young persons/families terminated the treatment, and 3.2% reported other reasons unspecified. Noncompleters did not vary by gender, χ^2 (df = 1, $N = 971$) = 0.37, $p = .54$; ethnicity, χ^2 (df = 4, $N = 967$) = 3.43, $p = .49$; and socioeconomic status, χ^2 (df = 5, $N = 964$) = 2.22, $p = .82$. Compared with the youth demographic characteristics for the region, access was high for Māori and those from the lowest socioeconomic communities or quintile 5 (Māori: WDHB region 16%, intervention 31%; Quintile 5: Waitakere City Territorial Local Authority [TLA] 16%, intervention 21%) (Table 1).

Descriptions of the Interventions

Reasons for referral were the following: personal relationships ($n = 332$), family stressors ($n = 265$), low mood ($n = 248$), anxiety ($n = 158$), grief and loss ($n = 139$), alcohol and drugs ($n = 57$), on medication for mental health concerns ($n = 32$), and other ($n = 79$) (referrals could include more than one issue). The types of interventions utilized were individual counseling (63.2%), group work (30.4%), family therapy (1.9%), individual plus family intervention (2.6%), and individual plus group intervention (1.9%).

Individual counseling was more frequently utilized by females (38.7% compared with males 28.9%), New Zealand Europeans (78.2%) and "Other" ethnic groups (75.6%) (compared with Māori [54.4%] and Pacific [48.2%] young people [$p < .001$]). Males more frequently attended group work compared with females (18.3% compared with females 14%, $p < .001$), and Pacific (51.8%) and Māori (48.9%) young people more frequently used group work compared with NZ European (20.1%) and other ethnic groups (22.2%) ($p < .001$). There were no differences in participation in family therapy by gender or ethnicity.

On average, eight individual counseling sessions were completed over a median period of 69 days for females and 70 days for males. Group work interventions were offered between 8–16 sessions, with the median period of time for the intervention being 77 days for both males and females. The median period of time for family therapy was 98 days for females and 77 days for males.

Scores

SDQ

There were significant reductions in psychological difficulties from pre- to postintervention score on the SDQ. The mean preintervention score was $M = 15.6$, $SD = 5.7$, and postintervention score was $M = 12.3$, $SD = 6.1$. On average, this was a shift from an average in the "slightly raised difficulties" range, indicating that clinically significant problems were likely, to the 0–13 range, indicating "clinically significant problems were unlikely," after the intervention ($n = 373$, *mean* change = −3.0992, 95% CI [−3.65, −2.55], $t_{372} = -11.11$, $p < .001$) (Figure 1). Females had a greater pre-/postintervention improvement than males ($p < .001$). There were no differ-

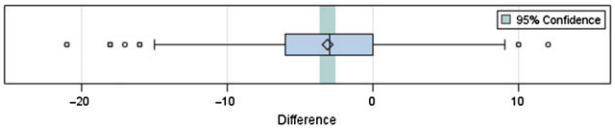

Figure 1. Distribution of Difference Between Pre- and Postintervention for Strengths and Difficulties Questionnaire Difficulties Score

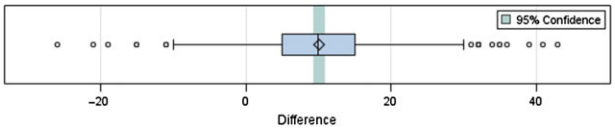

Figure 2. Distribution of Difference Between Pre- and Postintervention for Children's Global Assessment Scale Difficulties Score

ences in the effectiveness of the interventions by age, type of care package, ethnicity, number of sessions attended, and quintile.

C-GAS

There was a significant increase from pre- to postintervention scores on the C-GAS scale. The mean C-GAS score preintervention was $M = 62.7$, $SD = 11.2$, and postintervention was $M = 72.7$, $SD = 12.2$. On average, the mean C-GAS score increased after the intervention ($n = 512$, *mean* change = 10.1580, 95% CI [9.32–10.99], $t_{499} = 23.86$, $p < .001$) (Figure 2). This was a shift from an average in the 61–70 range, indicating "the young person may have difficulty in a single area, but generally functioning well," to the 80–71 range, indicating "no more than slight impairments in functioning at home, at school, or with peers." Older students were more likely to improve their C-GAS score ($p < .04$).There were no differences in the effectiveness of the interventions by ethnicity, number of sessions attended, and quintile.

SACS

There were significant reductions from pre to post intervention scores on the SACS scores. The mean SACS score preintervention was $M = 4.2$, $SD = 6.0$, and postintervention was $M = 2.9$, $SD = 4.8$. On average, the mean SACS score decreased after the intervention ($n = 314$, *mean* change = –0.9554, 95% CI [–1.35 to –0.56], $t_{313} = -4.76$, $p < .0001$) (Figure 3). This was a shift from an average in the 4–6 range, indicating "clinically significant problems and indicated the need for intervention," to the 2–4 range indicating the "need for further enquiry and/or more formal assessment." Younger students ($p < .001$) and Pacific students ($p = .05$) were more likely to report an improvement in the total SACS score after the intervention. There were no differences in the effectiveness of the interventions by gender, type of package, sessions attended, and quintile. It is worth noting that a large proportion of youth (34.7%) did not have a substance use problem at entry into the intervention, and 48% demonstrated no change to their posttest score.

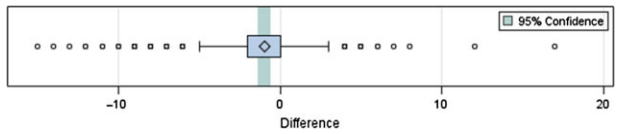

Figure 3. Distribution of Difference Between Pre- and Postintervention for Substance Abuse Choices Scale

Consumer Feedback Questionnaires

Data are presented under the themes that were identified in the inductive analysis (Table 2). There are two parts—Part One: Experiences of triage and facilitation to services, and Part Two: Experiences of the intervention. There are four overarching categories: Getting engaged in the service, skill set and engagement by counselors, involving others and timing, and positive outcomes observed/experienced. Within each of the overarching categories are further themes. These are illustrated with examples of quotes from the feedback questionnaires.

Getting Engaged in the Service

There were three main categories highlighting consumers' views about engaging in the "Your Choice" intervention. These themes highlighted consumers' perceptions of feeling well informed about what was offered, their ability to choose a person, their ethnicity, place, and type of service. One respondent commented that counseling in the home may have been a preferable option and should be considered in future program development. Satisfaction regarding the speed at which appointments were made was highlighted several times.

Skill Set and Engagement of Counselors

The five themes in this category highlighted the importance of the relationship with the counselor. Creating a safe environment and the explicit reassurance of professional boundaries for both young people and their families/whānau was noted. Several young people and their families described the counseling/groups as giving them a voice, particularly around difficult issues and conversations. In contrast, one participant felt that the counseling pushed them beyond their comfort levels. It was also acknowledged that "talking therapy" was not always the most appropriate mode for young people, with

Table 2. Themes from Consumer Feedback Questionnaires

Overarching categories	Name of theme	Example quotes
Part One: 1. Experiences of triage and facilitation to services		
Getting engaged in the service	A safe place to connect	*"The location of the service was close to me, it was a beautiful environment to work in. Everything in this process was easy and the counsellor was very suited to me/my beliefs about life etc."*
		"Confidentiality was well explained to both myself and my son, as to how it was applicable to us individually. I was grateful for this approach."
		"Appointments could be held in the home of the victim—for kids, more familiar place, more security."
	A good fit	*"No confusion/very clear about what to expect. Informative."* *"No confusion/very clear about what to expect. Informative."*
		"After two sessions I realised it was not a good personality mix for my son. I spoke to the counsellor who was great about changing back. [The service coordinator] said we could have another couple of sessions to make up for the two with the unmatched counsellor."
	Responsive and efficient	*"That same week [we were seen], very helpful, very supportive, friendly, efficient and eased a lot of stress for our whanau!"*
		"2 weeks. Very fast and efficient service. Which was needed at the time as we were in crisis."
		"I really didn't have to wait at all. My counsellor set it up for me and I got to see her weekly."
Part Two: 2. Experiences of the intervention		
Skill set and engagement by counselors	Friendliness and skilled	*". . . how knowledgeable the counsellor was, all the suggestions and things to help me get better. How I could just feel honest and open up."*
		"I automatically had an awesome connection and made me feel totally at ease, even after the first session I walked out with a massive load off my shoulders!!!"
		"The fact that I was suitably matched with a counsellor I could relate to and the fact that it's free is perfect for someone in my situation."
	In my own time	*"I wasn't pushed into anywhere I didn't want to go or talk about. I could open up slowly and at my own pace."*
	A neutral space to talk and be heard	*"It was beneficial to have a neutral setting to discuss some of the issues, where things could be out in the open."*
		". . . how knowledgeable the counsellor was, all the suggestions and things to help me get better. How I could just feel honest and open up."
		"I knew that nothing I said was going to be wrong or I would not be punished for saying it."
	Developing new skills	*"She always pointed out positive things from negative situations. She gave solid ideas for us to help solve problems."*
		"I now have resources and techniques to continually overcome issues and grow as a person."
		"I also make decisions based on using my brain more than just jumping into things."
	Supportive of partners and family/whānau	*"Enjoyed husband and wife counselling, encouraging our children and the whole family!"*
		"Some of the issues that were discussed opened the door for further conversation at home." [parent]
		"Whenever my counsellor thought it would be appropriate to involve my family she would tell me."
		"I chose for them not to be involved cause most of the time my family is the problem."
When interventions did not meet the young person's needs	Uncomfortable talking about problems	*"She tried [the counsellor] but I never really felt comfortable talking to people about personal stuff."*
		"Persuading/pushing me to say things I didn't want to tell, expecting to know things about me."
		"Probably more, not enough time to get comfortable with the counsellor."
	Number of sessions were insufficient	*"For what needed to be covered, more (sessions) would have been beneficial."*
		"8 sessions is not a lot in the stream of things, but I felt a lot was accomplished with the time."
	Different counseling strategies tried	*"My counsellor encouraged me to learn more about who I am and used more creative ways, instead of just talking (like drawing and using plastic toys)."*
Positive outcomes observed or experienced	Making changes	*"It's not just me my parents have noticed changes. I have been more happy and am wanting to associate with my friends more often."*
		"My daughter has a lot more confidence in herself. The positive way that her counsellor had of looking at everything has helped my daughter to find a positive thing in some bad things. A lot of the 'catch phrases' that her counsellor uses stick in my daughter's mind and she uses them a lot to help herself."
		"My relationships are continually getting better. I have had space to self-reflect and so have discovered more about myself."

counselors using creative ways to engage young people and their families. Finally, young people reported that their counselors supported them to develop skills and tools to overcome their current issues and identify warning signals to prevent future difficulties.

When Counseling Did Not Meet the Young Person's Needs

This theme highlighted issues when the young person felt that the intervention did not meet their needs in some way. Some participants felt uncomfortable sharing their personal feelings with their therapist/counselor, while others reported that the designated eight sessions were insufficient to develop a trusting relationship and cover all their issues within a given time. The option for further counseling or creative engagement should be considered to ensure that young people and their families with complex and longstanding issues have access to the services they require.

Positive Outcomes Observed

Young people and their families reported observing beneficial outcomes directly related to the counseling sessions, including the use of problem-solving techniques and improved communication.

Discussion

In this large and culturally diverse real-world study, young people with mild to moderate mental health concerns demonstrated improvements in psychological functioning and satisfaction with a simple process of facilitated access to free personalized treatment options. This is important for two reasons. First, because there is little research regarding effective mental health interventions in primary care and community settings, particularly among indigenous Māori youth and those from lower socioeconomic backgrounds. Second, this was a relatively simple and cost-effective intervention by diverting existing human resources to collaborate in a multidisciplinary setting. The uniqueness of this program was the single point of entry for varied mental health needs, the low threshold for accepting referrals, coordinator-assisted referrals (for those self-referring, schools, and community organizations unfamiliar with health referral processes), the collaborative multidisciplinary team (MDT consisting of primary and secondary care doctors, nurses, and social workers), prompt intake, supported transition to child and adolescent mental health (CAHMS) providers if clients' symptoms escalated, and follow-up by the coordinator to ensure usefulness of treatment and the offer of alternatives if preferred.

This study found modest but statistically significant improvements in all three outcome measures (reductions in the total difficulties SDQ score, C-GAS, and SACS scores). In addition, a strong theme emerged from consumer feedback, that youth found that counseling helped them learn skills to deal with stressful times and the perception that access to these services was easy and friendly. The high retention rate of participants within the intervention suggests that there was significant buy-in by the young person, their whānau/family, and the various stakeholders. Our high retention rate may be attributed to a number of factors, including the coordinator's role in engaging the young person and their whānau/family and ensuring "the right fit" in a culturally appropriate and facilitated manner. The collaborative approach by the various stakeholders (school, primary care, community health teams, and specialist youth teams) also ensured a seamless service that reduced family negotiation with multiple services, and finally the service was free, therefore reducing any financial barriers. Together, these improved scores, alongside consumer feedback and high retention rate, provide us with some confidence that young people on average found this to be an effective and acceptable strategy to reduce their symptoms and improve their skills in dealing with their mild to moderate mental health concerns. In addition, the scores at preintervention also give us confidence that the target population, that is, those with mild to moderate mental health concerns, has been correctly identified for the intervention, and that youth with serious mental health symptoms were not included.

There is scant literature regarding youth mental health interventions in community settings in New Zealand, with most interventions being adult focused and even fewer interventions demonstrating appropriateness for Māori, Pacific, and lower socioeconomic communities (Abel, Marshall, Riki, & Luscombe, 2012; Jansen et al., 2008; Mathieson, Mihaere, Collings, Dowell, & Stanley, 2012). Additionally, there are few programs based within the community setting that have demonstrated improvements in outcomes for youth populations with mild to moderate mental health concerns (Asarnow et al., 2005; Felker et al., 2004). There is growing evidence that an "integrative model of care" (National Institute for Health Care Management Foundation [NICHM], 2009), which actively encourages primary and mental healthcare providers to work together to identify the most appropriate screening and management in appropriate settings with ongoing bidirectional and communication, is likely to be more effective (Brito et al., 2010). There is also evidence to support school-based healthcare- and community youth-based organizations as an effective venue for providing care for youth with a range of mental health concerns (Denny, Balhorn, Lawrence, & Cosgriff, 2005; Rones & Hoagwood, 2000). Our collaborative and integrated model, to include schools and community-based organizations and young people and their whānau/family, is consistent with a public health model of addressing

mental health issues for children and young people from an ecological perspective (Stiffman et al., 2010).

With increasing demands on primary care and community services in New Zealand to manage youth with mild to moderate mental health concerns, our intervention found that a coordinated and facilitated approach to prioritizing adolescent mental health can have important positive health outcomes. In addition, the stakeholders felt that the referral and triage system reduced the workload of primary care and secondary mental health services by bringing them under one system, in a safe and managed process. We believe that this model can be generalized to other areas wishing to improve access for youth with mild to moderate mental health concerns. Our simple approach that utilizes existing resources and expertise from primary care and community services for collaborative multidisciplinary triaging, partnered with funding for free counseling and coordination, can create real savings and contribute toward reducing disparities for these vulnerable groups.

Limitations

This was a descriptive quasi-experimental pre- and postintervention study with no control group. We cannot imply causal relationships or attribute the improved outcomes entirely as proof of effectiveness of this intervention. Many mental health concerns and stressors may have resolved themselves without intervention (Hofstra, Van der Ende, & Verhulst, 2000; Moran et al., 2012); however, many youth do not get better without early treatment (Cohen, Cohen, & Brook, 1993; Moran et al., 2012). Those young people who participated in the "Your Choice" program may reflect a selection bias with those more motivated to change accessing the service (Henderson & Page, 2007). However, our intervention did not find bias among those participants who did and did not participate, and found no differences by gender, ethnicity, or quintile (socioeconomic factors). We are also unsure about the outcomes for those participants who did not complete both the pre- and posttest measures. This nonresponse to completing measures, despite completing the intervention, may also contribute bias. We do not have information about concurrent use of services, such as young people's access to primary care, CAMHS, school guidance or specialist youth health service teams. The consumer feedback may have missed the voices of those who are less likely to fill out consumer feedback forms and have less ability to write about their views (Jansen et al., 2008; Mazor, Clauser, Field, Yood, & Gurwitz, 2002). We are unclear about the effect of utilizing the outcome measures SDQ, C-GAS, and SACs on older participants aged 18–24 for whom some of the outcome measures were not originally designed. Also absent are the perspectives of the referrers about their perceptions of care and outcomes of their clients/patients. Further research is required to explore the stakeholder perspective and their perceptions of the "Your Choice" intervention. We were also unable to disentangle the various components of the intervention: the effect of coordinated facilitation to free services and multidisciplinary triage, and the effect of counseling modalities themselves. We suggest that a controlled study that investigates the effect of this type of intervention would be an important next step to identifying effective models of care for young people in New Zealand.

Conclusion

The "Your Choice" process of triage, engagement, and facilitated access to a choice of free therapies appears to be an acceptable and effective strategy to reduce symptoms for youth with mild to moderate mental health concerns. The process was acceptable for indigenous Māori and young people from lower socioeconomic communities. If adolescent mental health is integrated and prioritized, this collaborative approach could potentially reduce the mental health burden among young people and more efficiently utilize existing primary care and secondary mental health resources.

Acknowledgments

The "Your Choice" intervention was funded by Te Puna Manawa/HealthWEST Community Services and Waitemata District Health Board's (WDHB) Programme Based Marginal Analysis (PBMA) to improve delivery of services to vulnerable populations. This was alongside human resource support from Waitakere Youth Health Clinic (WYHC), Marinoto Child and Adolescent Mental Health Services, WDHB Child and Family Services, and Tobacco Alcohol and Drugs Services. We would also like to acknowledge the Faculty of Medical and Health Sciences Research Option for Medical Students, University of Auckland.

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