Can a paediatric department provide health care for vulnerable adolescents?

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Abstract

Background Adolescents can face multiple barriers when attempting to access primary health care and primary health providers often feel poorly placed to provide care. The Adolescent Resilience Clinic (ARC) was established to help overcome some of these difficulties.

Aim To evaluate whether goals of the ARC were achieved and identify areas for future improvement.

Methods A retrospective review of records for all patients referred to the ARC from May 2011 to May 2012.

Results A total 41 patients were seen, aged 12–18 years, the majority of whom (98%) were female. NZ Maori was the most common ethnicity (54%). Contraceptive needs and psychosocial issues were the predominant referral reasons. After consultation, most patients (81%) had multiple diagnoses. The proportion of patients participating in “risky” behaviours showed this group to be at risk of adverse outcomes. However, only 7% of patients had a complete HEeADSS assessment (an acronym guiding systematic psychosocial history taking assessing Home, Education or employment, Eating, Activities and affect, Drug use including cigarettes, Sexual risk behaviours and Suicide) documented.

Conclusions The ARC provides accessible healthcare to a vulnerable population. Further work is needed on how to accurately document HEeADSS assessments while ensuring confidentiality.

Adolescents face significant health problems. While they commonly present to their General Practitioners (GPs) with respiratory illnesses, skin conditions or musculoskeletal complaints, their concerns are often in relation to sex, stress, relationships, diet and depression. Moreover, the major causes of mortality and morbidity are due to accidents and injuries, mental health problems and participating in “risky” behaviours such as substance use and unprotected sexual intercourse.

Whilst the majority of New Zealand Adolescents (>90%) report subjectively good to excellent health, many experience chronic health conditions and chronic disability, 17% and 5% respectively. Furthermore, significant at risk behaviours have been identified in this population. 12% of adolescents in the Youth ’07 survey took part in either 5 or 6 at-risk behaviours - including illicit drug and cigarette use/sexual intercourse/violence/self-harm - highlighting the need for adolescent-appropriate healthcare services.

Adolescents usually seek health care from GPs and/or school health clinics, although a small group of adolescents use secondary care specialists as their main
health provider. Unfortunately, many young people experience difficulties accessing health care and this is particularly true for vulnerable young people. Concerns about confidentiality are a key reason why adolescents often forego seeking health care. Moreover, they often do not experience private and confidential healthcare. In addition, many adolescents do not know where to obtain help especially for mental health, substance abuse or reproductive issues. Other barriers to accessing health care include lack of transport, poor availability of care, cost, difficulty obtaining an appointment, unfriendly environment and/or staff and fear that health workers will scold, ask difficult questions or carry out unpleasant procedures.

GP's also report difficulties in providing health care to adolescents and that such consultations often require more time. A HEeADSS assessment takes time, which may not be possible within the time constraints of primary care. Moreover, vulnerable adolescents frequently participate in multiple risk behaviours and may be more likely to require lengthy consultations. However, research suggests that the average consultation time for adolescents is shorter than for adults or children. Other difficulties cited by GPs about working with adolescents include feeling inadequately trained in working with young people, difficulty managing complex health problems and lack of confidence in their consultation skills. Many desire ongoing education in these areas and linkages with and support from other service providers.

What role therefore might a secondary level paediatric clinic play in helping overcome such barriers? Unfortunately there is a lack of literature on the provision of adolescent focused health care at secondary level hospitals.

Research on youth friendly services has tended to focus on primary care school based clinics and Youth One stop shops, and even then the evidence for these initiatives is small. The available literature on adolescent health care at secondary level has tended to focus on young people with chronic health issues and on the issue of transition.

In 2010, Tauranga Hospital, a secondary level hospital, undertook a review of the services available for adolescents both within the hospital and the community. As part of this, primary care providers were specifically asked what services they felt the hospital should provide. The key issues identified were a desire for a service that would assist in managing young people with multiple and often complex needs especially those considered vulnerable (Personal communication, May 2014: B. Daniel, Youth Adolescent Public Health Nurse, BOPDHB; Dr L Claydon MOSS, Team Leader Clinic 2 Sexual Health, BOPDHB) and to offer advice and support to primary care clinicians.

A secondary desire was for a service that could offer Jadelle (Personal communication May 2014 with Dr L Claydon). Jadelle is an intradermal form of progestin-based contraception lasting up to 5 years, the efficacy of which is independent of individual compliance. Jadelle is of great potential benefit to adolescents in need of contraception, but can be difficult to access as initiation and continuation are provider dependent. In 2011 there were few providers in Tauranga resulting in a significant waiting list. However, the newly appointed paediatrician was trained in...
intradermal insertion. A business case was submitted and the hospital agreed to fund two Jadelle insertions per week.

In May 2011, the ARC was established. The goal was to provide comprehensive youth focused assessment on adolescents identified as being vulnerable by their primary health care providers. It also aimed to link adolescents into appropriate services and offer support to primary care providers. Each patient was offered a one hour appointment allowing a thorough and holistic assessment. As a hospital service the appointments are free. The clinic was set up to see one new patient and two follow-up patients each week. It was designed as a trial to see whether such a service was actually needed and whether such a service could be provided in the setting of a secondary level hospital.

Since the clinic was a trial it was not officially announced but informally advertised to the Tauranga sexual health centre and the adolescent public health nurses as these were the two services most requesting assistance with care for adolescents they perceived as vulnerable. There were no set criteria as to what constituted vulnerable. Patients attending high school or under 18 years of age if no longer attending high school were eligible for referral. A total of 36 clinics were offered within the first year.

**Method**

A retrospective review was completed of all electronic records of all patients referred to and attending the ARC from May 2011 to May 2012. Patients referred to the ARC but unable to attend the allocated Thursday were included in the study if they were seen by the same ARC consultant in a different outpatient clinic. Patients not referred to the ARC but seen in that clinic slot because patients could only attend on a Thursday were excluded. All patients referred to the ARC clinic were seen. The Paediatric Department at Tauranga Hospital runs paper lite hence the review of electronic records.

**Results**

Forty-one patients were seen of whom 40 were female (98%). Just over half the patients were NZ Maori (54%) with 34% NZ European, 4% Indian and 7% other European. Patients ranged in age from 12 to 18 years with the median and mode age of 16 years. NZ Maori were younger than their NZ European counter parts (An unpaired t-test analysis p value 0.0087). As demonstrated in figure one below, patients were predominantly from lower socio-economic neighbourhoods.
Patients were referred from a variety of sources (Figure 2). The majority of referrals (32%) were from the Tauranga Hospital Sexual Health Clinic, followed by internal referrals from paediatricians (22%).

Figure 2. Sources of referral to ARC
The majority of patients (76%) were accompanied by another person (Figure 3) and nearly half of patients were accompanied by a parent or other family member (44%).

Figure 3. Persons accompanying ARC patients to clinic appointments

Fifty-nine percent of patients were referred for a single reason either for Jadelle (50%) or for a young person’s health assessment (YPHA) (38%). Twenty-nine percent were referred for two reasons and 12% for three or more reasons. Of those referred for several reasons, the two most common combinations were for Jadelle, a YPHA and medical condition(s) (18%), and for Jadelle and a YPHC (18%). Almost a quarter of patients (24%) referred had a general medical condition as part of their referral with the three most common conditions being recurrent abdominal pain (30%), eczema (20%), and obesity (20%). Mental health issues were stated as a reason referral in 20% of all ARC patients.

Eighty-one percent of patients had multiple diagnoses after their consultation(s). The three most common combinations were psychosocial and mental health (12%), psychosocial and medical (12%), and Jadelle and medical (12%). Of those receiving treatment 63% received treatment for a general medical condition, 37% had Jadelle inserted and 22% had contraception other than Jadelle (22%) prescribed. The most common medical treatments provided were eczema management (31%), asthma management (15%) and dietary supplement prescriptions (15%).

Only seven percent of patients had a HEAaDSS assessment completely documented. A little less than half (43.9%) had some aspects of the HEeADSS assessment documented. For 20% of patients neither the completion status nor results relevant to the HEeADSS assessment were documented. Documentation of presence or absence of at-risk behaviours, (smoking, alcohol use, illicit drug use and self-harm) was not documented for a substantial proportion of ARC patients (figure 4). Of those for whom at-risk behaviour status was documented, a greater proportion were taking part compared with not, with the sole exception of illicit drug-use. In cases of documented illicit drug use, all identified cannabis as their only drug used.
Cessation of an at-risk behaviours occurred during the study period for 2% of those documented as smoking and for 2% of those documented as using illicit drugs. Fifty-six percent of patients received specific medical treatment.

Thirty percent of patients were referred to another service. Of those referred, the majority (57%) had referrals made to multiple services. The five most common referrals were to Child and Adolescent Mental Health Service and their Maori equivalent, Adolescent Public Health Nurses, Clinical Psychology Tauranga Hospital, School Health Nurses and Northern Health Schooling (hospital and/or community-based transitional education for children with prolonged illness-related school absence).

Nearly half of ARC patients (46%) are enrolled for follow-up, 20% were discharged due to no indications for follow-up and 24% were discharged after failing to make contact with the clinic more than 1 month after an appointment was not attended; 10% of patients were discharged after moving area or after being referred to adult services once older than 18 years.

**Discussion**

The results of this study suggest that the novel ARC is meeting its goals. All patients who were referred were seen, with more new patients in total than intended; both findings reflective of the high level of accessibility achieved. That referrals came from primary healthcare sources who were not told of the service confirms the perceived need for a youth-specific health service.

Interestingly, nearly a quarter of referrals were from paediatricians within the hospital, suggesting that many paediatricians still lack confidence in their ability to address adolescent issues.²¹
The patients seen at the ARC can be considered vulnerable. This study found these patients to have higher rates of risk taking behaviours compared with the New Zealand adolescent population in terms of smoking (77% vs 8%), illicit drug use (42% vs 5%), alcohol consumption (77% vs 61%) and self-harm (60% vs 15–25%). Furthermore, the ARC is seeing patients predominantly from lower socioeconomic neighbourhoods, demonstrating excellent accessibility for a cohort of the population who encounter greater difficulties when accessing health care.

The large Maori component of ARC patients (greater than the population average), reflects another major success of the ARC service as Maori adolescents frequently have greater difficulty in accessing health services and have poorer health outcomes compared with non-Maori.

In addition to being vulnerable, the adolescents seen had multiple health issues. 20% of patients seen in the ARC were referred for mental health related issues, a higher rate compared to previous research in which psychological conditions accounted for 5.4% of reasons for adolescent healthcare consultation.

Nearly one-third of ARC patients were referred onto other services, as would be expected given their complexity. The high referral rate may also reflect that the ARC Paediatrician had a greater knowledge of the available youth-targeted services and more established relationships with the referral services. Certainly the clinic is meeting its aim of seeing complex adolescents rather than patients who could be easily managed in primary care. Whilst the clinic is meeting its aim of providing Jadelle, it could be providing more as funding is available for 104 Jadelle insertions per year.

The paucity of male patients accessing the ARC is an area of concern. Globally, adolescent males access health care less than females but not to this extreme. This may be explained, at least in part, by the fact that contraception accounted for a large proportion of referral reasons and that the greatest proportion of referrals came from the sexual health clinic, which has a higher female to male ratio. There is limited evidence on how to target and/or keep males accessing health care.

The major deficiency of the ARC is the lack of documentation of HEeADSS assessments. The high non-documentation rates for at-risk behaviours limit the accuracy when drawing comparisons between the ARC audit results and corresponding national data. Therefore, uncertainty remains as to whether the true prevalence of ARC patient at-risk behaviours has been under or over represented. We would argue that HEeADSS assessments were completed in the vast majority of patients but deliberately not documented due to concerns about confidentiality.

Confidentiality is recognized as a cornerstone of effective adolescent health care. The assurance of this is vital to the physician-patient relationship. There are concerns about how confidential electronic records are, especially in comparison to paper records. Electronic records can be easier to view with an increased potential for breaches in privacy.

The media has been quick to highlight when breaches have occurred which may explain consumers’ concerns. Adolescents are likely to forgo medical care if they are worried about confidentiality especially for sensitive issues such as sexual and mental health problems.
However, good medical record keeping is essential. Medical records are needed to ensure continuity of care for the patient, act as an aide memoire, facilitate communication between different members of the health team and are vital for defending against complaints. Nevertheless medical records are often found wanting.

As a result of this study, the problem of where and how to record HEeADSS assessment has been highlighted. Several solutions have been tried. One was to lock the letter with access only to the author. This proved untenable as correspondence to the referrer was expected and there were concerns about what would happen if the author of the letter was unavailable. Next a separate letter with all the HEeADSS information was made. However, this created more work for the administration staff and still left the problem about where this letter was stored.

Currently we are trailing using a HEeADSS proforma to record the information. This gets scanned into the patient records but is not sent to the patient or referrer. Whilst it can still be accessed it is hoped that since it is filled in by hand it wouldn’t be given as much notice in comparison with a typed letter and is less likely to be sent out inadvertently. Whether this is successful remains to be seen.

Conclusion

The ARC demonstrates that a secondary level hospital can offer accessible and holistic care to vulnerable adolescents. The major teething problem for this new service has been how to ensure confidentiality whilst enabling accurate consultation recording. This is a work in progress. In addition, this study only established that care was provided but no qualitative information in regards to the care, which remains the next question in the clinic’s development.

Competing interests: Nil.

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References:
