A collaborative practice model for rural mental health

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BACKGROUND

This paper aims to present an outline of a collaborative model of mental health care between primary health, mental health specialists and a local rural hospital. The model discussed had its beginnings when health care practitioners responding to a local need collaborated to enhance service provision. Much of this model development stemmed from the concern about suicide rates in the local community and rapidly expanded to encompass all of mental illness.

The high suicide rate in Australia, particularly of young males and those in rural communities is well established in the literature.[1,2,3] On a local level statistics for the Shire of Mount Alexander (population 17 000) indicate that completed suicide rates were above the State average on a consistent basis during the years of 1994-1996.[4] This is supported anecdotally by local General Practitioners (GPs) who noted that mental illness along with completed and non-completed suicides were prevalent. They felt the health system was inadequate in responding to this in that it was pitched at management of physical rather than psychiatric illness. This inadequacy is discussed by Rathbone-McCuan, et al[5] and Humphries and Mathhews-Cowley[6], who indicate that small rural communities are limited in their scope and availability to provide mental health care due to small population size. Similarly, mental health services in Australia are considered inadequate and under resourced and in particular rurality poses its own set of challenges.[7,8,9]

In collaboration with the small local community mental health team, staff from the general hospital discussed the problems — particularly around follow up — they encountered in managing people at risk of self-harm or suicide attempts. It was thought by combining effort that capacity to manage these clients would be enhanced. An informal agreement was developed whereby the mental health staff provided education and clinical supervision support to hospital staff and the hospital facilitated short-term inpatient care for low to medium risk clients. This agreement enabled clients to be cared for, providing a safe place for the client in their local community, whilst follow up plans were established. Previously these clients on presentation to the general hospital were either sent home or sent to a regional hospital for assessment and often not admitted due to lack of available beds.

Discussion about integration of services to meet the demand is occurring in the primary care sector, leading to both formal or informal de facto arrangements largely driven by funding cutbacks or deficiencies.[10,11] In this situation lack of resources has encouraged staff to take leadership, embrace the challenge, be pragmatic and creative about how they may meet the clearly establish need. This collaborative model of care is aligned with the national priorities for mental health as outlined in the National Mental Health Plan 2003-2008 in that it improves service responsiveness.[12]

The regional mental health service was given funding from the Department Human Services (DHS) to conduct a suicide intervention project and invited the Central Victorian Health Alliance (CHVA) to participate. In recognition of the ground work already being developed

CVHA selected the hospital as the pilot site. At this point a broader group of stakeholders were brought together to discuss this issue. These included the local general practitioners, police, ambulance, community health, community mental health, schools and the local hospital.

The group conducted a needs analysis that indicated the gaps in service within and between professional groups.[13] Recommendations to improve communication and the skills of staff to eliminate these gaps were made and timelines set for implementation.[14] It was thought by skilling staff then they would be more confident in detecting and presenting information about clients, thereby increasing co-operation and enhancing communication.

Through involvement in the suicide intervention project the broader mental health issues became more apparent. Over time practice changed from focusing on suicide to encompassing all of mental health. The main driver of the change process was one enthusiastic member of staff who championed and advocated for the changes. The staff member was given executive support and the mandate to move forward. As part of the process, changes were systematically evaluated before and after the change in the model of care was implemented.

METHODS

A mixed methods approach including action learning pre/post survey and analysis of admission data was used to assess the change in model of care.

General practitioners were surveyed using a 12 item questionnaire and hospital nursing staff were surveyed using an eight item questionnaire prior to implementing the education and clinical supervision program. General practitioners were asked extra questions to determine their views as users of the hospital service.

A survey based pre/post method was used to assess the education program and changes made to facilitate client admission. Twelve months later the questionnaires were repeated and answers compared. Group responses were then compared.

In addition, numbers of psychiatric patient attendances were collected from the hospital patient master index.

Accident and emergency attendance data including reason for presentation, numbers, gender was extrapolated from the accident and emergency attendance register and admitted episodes from the hospital ICD-10-AM coding system.

RESULTS

Accident and emergency presentation data

Data from presentations to the accident and emergency department of mental health clients, was compiled from the register for the previous three financial years. Table 1 outlines the main types of mental illness presentations to the local rural hospital.

Table 1 Accident and emergency presentation for mental health related disorder

Year	Overdose	Self harm	General psychiatric	Anxiety, depression etc	Other
2001–02	23	21	18	40	8
2002–03	20	16	25	51	2
2003–04	33	31	43	63	2

Overdose — drug overdose with intention of self harm; Self harm — threatening suicide, suicidal ideation, mutilation, gunshot, hanging, gassing, etc.; General Psychiatric — psychosis, schizophrenia, psychiatric assessment; Anxiety and depression, Other — history of mental illness, requesting medication, somatic symptoms.

Further analysis of data determined the gender balance, total number of presentations, the number that were either admitted to the local rural hospital or transferred to the regional hospital and those that were discharged home (Table 2).

Table 2 Accident and emergency presentations — gender and admission status

Year	Male	Female	Total	Discharge home	Admitted/ transferred
2001–02	40	70	110	49%	51%
2002–03	49	65	114	58%	42%
2003–04	82	90	172	46%	54%

Data were extracted from the clinical coding system where the primary cause for inpatient admission was related to a mental illness as listed in Table 3. These admissions were from the accident and emergency department or direct admissions from the community.

Table 3 Admitted episodes for mental health disorder

Year	*Admissions
2001–02	113
2002–03	156
2003–04	181

* Includes all mental illness including anxiety, depression, psychosis, suicide attempt, self harm, schizophrenia, etc

General practitioner surveys

GPs were asked 12 questions ranging from need for admission, suitability of the general hospital for mental illness admission, resources required, skills and support required. In total 12 GPs were sent surveys of that number seven GPs completed at time one (baseline) and eight at time two (follow up survey).

Responses sought to most questions were (free text) open ended, with the exception of the two items about admission to the local hospital and the support from the community psychiatric team. These results are presented in Table 4.

Table 4 Responses to the GP survey (pre and post)

Question	Time one — pre n=7		Time two — post n=8	
	Yes	No	Yes	No
Perceived need for increased admissions to local hospital	4	3	7	1
Adequate support received from community psychiatric team.	4	3	6	3

In general most GPs found the role of the local hospital to be a short-term solution and physical environment not ideal in managing the acute mentally ill at baseline. The tone of responses changed in the follow up survey in that GPs perceived that given appropriate selection of clients they could be managed safely and adequately in the local hospital with support from the community mental health team.

General practitioners expressed generalised lack of skill in the area of providing primary mental health care. Comments at the follow up survey were more directed at identifying specific skills acquisition needs. Similarly, GPs were asked what policies and guidelines they would like, they requested general guidelines at time one and at the second survey asked for more specific management guidelines.

General practitioners found that they had improved access to psychiatrists and case workers and were working closer with these health professionals. They recognise that further effort in enhancing working relationships needs to occur.

Hospital nursing staff

Hospital nurses were asked eight questions ranging from knowledge and skills, resources, support and importance of the service. In total 30 nurses were sent surveys, 26 nurses responded at baseline with 21 nurses at follow up.

Table 5 Responses to the hospital nursing staff survey (pre and post)

Question	Time one — pre		Time two — post	
	Yes	No	Yes	No
Noticed an increase in the number of mental health clients in the last 12 months	92%	8%	86%	14%
Adequate knowledge and skills	35%	65%	62%	38%
Has education increased your confidence	35%	65%	76%	24%
Environment suitable for management of mental health clients	27%	73%	52%	48%
Adequate after hours support from community mental health	46%	54%	71%	29%

In general, most nurses rated the importance of offering service to mental health clients either high or very high at both time points. Only one staff member said the service was not important.

Evaluation of the education program — hospital nursing staff

Hospital nurses were asked five questions ranging from adequacy of topics, rating of appropriateness of education, improvement in knowledge base and requirement for ongoing education. In total 26 nurses responded at time 1 with 21 at time 2.

Table 6 Evaluation of the education program (pre and post)

Question	Time one — pre		Time two — post	
	Yes	No	Yes	No
Appropriate topics covered	42%	58%	71%	29%
Willingness to continue with ongoing education	88%	12%	81%	19%

All nurses rated the quality of the education sessions as good to excellent. At time two most nurses rated their level of knowledge as improved to the high/very high range in comparison to time one (only one nurse rated there was no difference in their skill level).

DISCUSSION

The data presented indicates a trend increase in mental health presentations at accident and emergency and subsequent inpatient admissions. It is interesting to note that the number of admissions resulting from accident and emergency presentations does not correlate with the number of admitted episodes for each year. Due to enhanced relationships and co-operation clients will often be admitted directly from the community via the community mental health team and GPs rather than through the Accident and Emergency department. Therefore, the increase in admitted episodes may be reflective of the GPs increased knowledge and skills in primary mental health and the general acceptance of this model of care.

Of interest to note is the increase in the number of men attending accident and emergency with the ratio of male to female in the 2003/2004 year at almost 50/50. The reluctance of men to present with mental health concerns is well noted in the literature, therefore this trend is a pleasing outcome. What is not clear is why this is so, other than the generalised community approach to positive promotion of mental health issues.

There is an apparent increase in the number of accident and emergency presentations for overdose or self-harm. It is unclear if this related to an increase in incidence or improved recognition of the hallmarks of self-harm that might have previously been attributed to a differential cause. The issue of stigmatisation of mental illness in rural communities is particularly important, as staff caring for these clients are often those the client knows of, or is related to. Anecdotally, health professionals would often document somatic symptoms as the reason for presentation rather than suicide attempt. This was generally motivated by protective concerns about stigmatising the client. With greater awareness and changes to the privacy legislation documentation practices have improved, therefore the increase may be related to better reporting rather than increased incidence.

The increase in the accident and emergency presentation of general psychiatric issues may be related to the greater role that both GPs and hospital has taken in mental health.

The model of care has been promoted within the local community through networks of health professionals and carers, publication in the hospitals annual report, articles in the local paper and through community forums. In one forum over 250 community members attended, which demonstrates the interest in the topic but also the level of concern the community has. The message that the hospital and GPs are sympathetic and responsive to mental health issues has spread and is likely to be a reason for an increase in presentations. This trend supports an assertion made by Keks, et al[15] who have found that clients prefer to attend their local GP for psychiatric care. In recent times we have had several out of area clients present to the accident and emergency department because they were aware of the hospitals reputation and that they will be seen by a GP responsive to their needs.

One would question if the effects of national initiatives such as "beyondblue" in destigmatising depression have also had an effect on the increase in presentations for anxiety and depression. Since setting up the "beyondblue" website in 2001 they have had in excess of 645 000 visits to the site and the initiative has been successful in promoting media interest with 1762 stories produced in three years.[16]

The surveys indicate that all the initiatives tried appear to be working to increase knowledge and skills in the management of primary mental health issues. Along with this has been an increase in confidence in caring for those presenting with mental health issues. The "beyondblue" initiative has been a key advocate in encouraging the Commonwealth Government to establish the Better Outcomes in Mental Health Care program.[16,17,18] Through this program the fact that GPs play a key role in primary mental health has been recognised and funding allocated to provide appropriate training and support services to GPs.

There is a further issue to address where both nursing staff and general practitioners expressed concern about the suitability of the local hospital environment in which to manage mental clients at the first survey. This remains a concern but less so at the second survey. Work in developing the criteria that restricts admission to low to medium risk clients has helped to lessen the concern. And ongoing work with education and investigating a model of clinical supervision continues.

Of note is the increased perception by the nurses and doctors of support from community mental health colleagues. This illustrates the goodwill of rural health practitioners to work together for better outcomes for their clients.

RECOMMENDATIONS

From the analysis the following recommendations are made:

- ongoing education of both medical and nursing staff is required

- promotion of mental health issues in the community

- develop a demonstration project proposal to submit for funding

- develop collaborative protocols for inpatient management.

CONCLUSION

This project began because of gaps in service provision and follow up and has flourished to a sustainable practical model of collaborative mental health care. Evaluation clearly indicates that clients are aware of the service and are availing themselves of it. Along with this, staff are growing in skill and confidence in managing these clients. It is evident there is more work to be done to further define this model so that others who choose to, can replicate or adapt the model for their communities needs.

Finally, the goodwill of the community mental health team, hospital nursing staff and GPs must be acknowledged in making this early work such a success.

REFERENCES

1.   Cantor CH, Neulinger K, De Leon D. Australian suicide trends 1964–1977: youth and beyond? MJA 1999;171:137–141.

2.   Hoogland S, Pieterse R. Suicide in Australia, a dying shame. Sydney: Wesley Mission, 2000.

3.   Caldwell TM, Jorm AF, Dear KBG. Suicide and mental health in rural, remote and metropolitan areas in Australia. MJA 2004;181(7):S10–S14.

4. Suicide Prevention Taskforce. Connections, suicide prevention in the Loddon Mallee Region. Melbourne:DHS, 1999;40.

5. Rathbone-McCuan E, Bane, Share. Rural mental health: A discussion of service capacity building for rural elders. JGSW 2003;41(3-4):301-312.

6. Humphries J, Matthews-Cowley S. Models of health service delivery for small rural and remote communities. Bendigo: La Trobe University, 1999;15.

7. Groom G, & Hickie I. Out of hospital, out of mind! A review of Mental Health Services in Australia 2003. Canberra: Mental Health Council of Australia, 2003;6.

8. Armstrong F. Out of hospital, out of mind: The state of mental health. ANJ 11(1) 2003;23-24.

9. Rajkumar S, Hoolahan B. Remoteness and issues in mental health care: experience from rural Australia. Centre for Rural and Remote Mental Health. Orange, New South Wales: University of Newcastle, 2004.

10. Linzmayer C. Integrated human services in rural areas: A social work approach. Rural social work. Australia: University of South Australia, June 2003;8(1):25-37.

11. Gale JA, Deprez RD. A public health approach to the challenges of rural mental health service integration. Stamm Bhudnall Ed. Rural behavioural health care: An interdisciplinary guide. American Psychological Association Washington DC US 2003;95-108 xiv 250.

12. Australian Health Ministers. National Mental Health Plan 2003-2008. Canberra: Commonwealth of Australia, 2003;19.

13. Loddon Mallee Regional Primary Care Partnerships. Effective follow-up of suicidal clients of hospital emergency departments project — An integrated community based response. National suicide prevention strategy funding application form. Bendigo: 2002;8.

14. Judd F, Hodgins G, Hulbert C, Scopelliti J, McFarlane C. Identifying, understanding and dealing with deliberate self-harm. Bendigo: Centre for Rural Mental Health, 2004;4.

15. Keks NA, Altson BM, Sacks TL, Hustig HH, Tanaghow A. General practitioners are often the patient's preferred source of psychiatric care; they can also play a role as coordinators of the care team for patients with complex needs. MJA 1998.

16. Hickie IB. Reducing the burden of depression: are we making progress in Australia? MJA 2004;181(7):S4-S5.

17. Hickie I, Groom G. Primary care-led mental health service reform: an outline of the better outcomes in mental health care initiative. Australas Psychiatry 2002;10:376-382.

18. Hickie IB, Pirkis JE, Blashki GA, Groom GL, Davenport TA. General practitioners' response to depression and anxiety in the Australian community: a preliminary analysis. MJA 2004;181(7):S15-20 2004.

PRESENTER

Barbara Gregory is a Registered Nurse who has championed the change in model of service delivery for mental health clients. She has worked in rural health for many years and undertakes a diverse role including clinical care, mental health liaison and cardiac rehabilitation.