'G FOR MENTAL HEALTH COUNTER DISASTER SERVICES

VICTORIA'S EXPERIENCE OF ASH WEDNESDAY

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INTRODUCTION

The activities of mental health teams in the first twelve months of the bushfires showed that a number of roles and styles of service delivery can be utilized in providing assistance to a large scale community disaster. In that time, more than 80 workers drawn from 9 separate mental health agencies participated in the State disaster relief response. As the services evolved from a predisaster planning vacuum, considerable improvisation was required to integrate the mental health programme with other community recovery processes. Although planning errors were made and opportunities missed, the services produced some innovative and valuable strategies for mental health intervention in future disasters.

PREDISASTER PLANNING

Victoria's disaster planning framework prior to Ash Wednesday was broad in its coverage but included only a nominal psychological component. In fact, the two major support sub-plans - medical and welfare - each assumed a portion of responsibility for provision of psychological services in a disaster. The Medical Displan, based upon an emergency services model in which issues of rescue and protection of public health take precedence, included mental health representation, at least hypothetically, as part of the emergency medical team structure. The implication within the plan was that these services would be used for specialist assistance, to be called upon when and if psychiatric casualties emerged. No specific plan existed for putting services on the ground and roles of the mental health team members were left undefined. Similarly, there was no provision for the long-term nature of recovery. In contrast, the Welfare Displan focused upon short and long term recovery issues and anticipated that psychological needs would form a distinct feature of the human welfare crisis caused by disaster. An active outreach model, similar to the approach of Heffron (1977a) and other American workers, (eg Zarle, Hartsough and Ottinger, 1974; Tuckman, 1973) was favoured by disaster welfare planners and although not specifically written into the plan, had been discussed at pre Ash Wednesday planning meetings. No attempt was made to link the outreach approach to the activities of the mental health teams that were proposed to operate under Medical Displan.

Each plan therefore required further development, but this required that they be cross referenced. Health and welfare disaster planners had not resolved the potentially conflictual elements within their plans, nor addressed the basic differences in models and philosophies. It was most significant that, as the Welfare Disaster Plan was to assume authority in the post impact period, there was no health presence on its central co-ordinating body.

A second planning factor that dominated Ash Wednesday services was the heavy centralisation of activation and co-ordination functions, in line with the early developmental stage of the larger State Disaster Plan. While it was anticipated that planning would occur at shire and regional level, these structures were not in place prior to Ash Wednesday. Consequently, agencies sharing some responsibility for the fire affected areas had not been brought together with a co-ordinated disaster relief framework. Given the magnitude of the Ash Wednesday event, this had implications for all disaster relief programmes but was particularly critical to the delivery and co-ordination of mental health services.

EARLY RESPONSE

The early response of the central mental health administration was characterised by caution and passivity. Much of the early energy was devoted to clarifying potential roles and solving the organizational complexities of Displan. The major problem was lack of reliable information on the location and general needs of the fire affected communities, although several suggestions were registered by the central health authority that psychiatric teams may be required. Offers of assistance were also received from local and interstate professionals as well as from concerned individuals in the community. A mental health team despatched to one of the fire devastated areas reported on problems within the helpers, but was unable to make a confident prediction on the likely needs of the larger community. It was clear that a mental health response would need to be improvised and, although not having a particular direction to offer, regional units were alerted to potential roles and requested to place teams of suitable staff on standby.

The passivity of the early stance is best portrayed by the establishment of a 24 hour telephone counselling service on day 3. This service was announced through a Ministerial press release and the community encouraged to make contact for enquiries or requests for assistance. Mobile teams were available to respond to any requests on a rostered basis over a 2 day period. The telephone counselling service failed to attract attention as it clearly did not meet the needs of the disaster affected population. If mental health services were to make an effective and valuable contribution then it was clear that a more active approch would be required.

This fact was particularly highlighted by the absence of mental health services within the outreach support programme initiated under the Welfare Displan, which had as its broad objectives the provision of support, practical assistance, and the assessment of individual needs and referral to appropriate agencies. The lead agency, the Victorian Council of Churches, together with the Department of Community Welfare Services, initiated a large scale visitation program in which church officers were organized to recruit, plan and brief volunteers to make personal visits to every fire affected household in the State. Within a week of impact the programme commenced and over a period of 4 weeks, more than 3,000 outreach visits were made by approximately 250 outreach workers comprising clergy, volunteer professional workers in the human service area and selected lay people.

The Ministerial press release announcing the mental health telephone service and mobile teams on standby understandably aroused some concern and confusion amongst welfare planners. Suspicion regarding the motives of mental health intervention was evident and this was exacerbated when one particular "volunteer" psychiatric team independently entered one of the fire affected areas and attempted to make personal contact with victims of the disaster. The urgent need for co-ordination led to a meeting between mental health and welfare administrators on day 6 and this point marked the beginning of a significant shift in the mental health stance. The absence of mental health teams was recognized, but concern was expressed that an overt psychiatric presence would stigmatize natural healing processes and alienate the fire affected community. It was feared that imported mental health teams would operate independently of the emergent local co-ordinating bodies and retard community recovery by exacerbating the already high levels of anxiety and confusion. In a step aimed at increasing the acceptability of the services, it was agreed that mental health teams would work under the direction of the local welfare co-ordinating body.

Each mental agency with a regional responsibility for the fire areas was instructed to deploy teams and make contact with local health and welfare providers. In most instances, the teams were small and multidisciplinary based, and although comprised of individuals who had practised within a community mental health model, generally had no prior experience of disaster work. The first task faced by the teams was the establishment of credibility with local workers. In all but one of the fire affected areas, mental health services had not played an active role prior to the bushfires and were justifiably regarded as "outsiders" and considerable sensitivity was required in dealing with this issue. A marked constraint was evident in the experience of the one mental health team that had operated a pre bushfire community nursing service within their particular fire affected area. The referral networks that had been developed by the agency and the knowledge of pre-disaster community traditions allowed this team to operate more effectively at an earlier stage than other teams.

ROLES OF MENTAL HEALTH TEAMS

From an awkward beginning, a number of roles emerged for the mental health teams in the weeks and months that followed their entry. As they become involved in the recovery, all teams came to appreciate that their work would be continuing at a time when many other counter disaster services were able to withdraw. While some teams discontinued their services around four months after the fires, others found a need to continue working in the area for the first year, and are still, at the fourteen month point, providing a secondary consultative service to local agencies. At a statewide meeting of team leaders held six months after the programme commenced, differences in operational styles and objectives were identified. Fom the descriptive accounts presented by the service providers (Tan and Pawsey, in press), the activities of the teams can be broadly discussed in six categories.

Participation in Outreach Program

Although the outreach program was organised independently of the mental health services, a number of mental health workers became actively involved as participants, specialist consultants and resources for referral. It was evident from the outset that the program filled a significant gap in the welfare relief measures. Contrary to claims that people had too many visits from relief workers, the outreach visitors were warmly welcomed. Virtually all previous visits had been brief and task-oriented, aimed at achieving specific objectives such as loss or damage assessments. The outreach workers reported that the majority of disaster affected individuals valued the opportunity to talk through their traumatic experience and it was common for up to two hours to be spent with each family (Victorian Welfare Displan Executive, 1983).

However, it was also evident that the program was limited in its ability to meet the ongoing psychological needs of the community because of its short term, one-contact orientation. In many cases, outreach workers identified individuals and families in need of further contact and support and referred across to the mental health team who then provided follow up visits, often under the guise of "outreach counsellors". The specialist consultancy role of mental health teams to outreach workers was only fully explored in one area where a follow up round of visits was organized 6 months after the fires with identical aims to the early visits. However, added to the earlier programme were mental health consultants who were actively involved at this stage in the briefing and debriefing of the outreach workers and in providing assistance in the identification of those cases that required follow up or professional

referral. Over a period of 3 weeks 720 households were visited and with the consultation offered by the mental health workers, approximately twelve percent of individuals or families were judged to warrant further follow up, many of them urgently (Victorian Welfare Displan Executive, 1983). Through the close co-operation that developed between the local volunteer counsellors and the mental health professionals working in this programme, a paradigm was created that offers a model for mental health intervention in future large scale Australian disasters.

Public Education and Information

A second role played by the Mental Health teams was the dissemination of information to promote community awareness of normal response patterns to disaster. Within days of the fires, two psychiatric professionals prepared separate leaflets on the reactions of children and adults and in the following weeks, ten thousand copies were prepared in brochure form and distributed widely through all fire affected areas[1]. (Footnote 1). (The leaflets were used extensively in the outreach programmes, at welfare relief centres, medical agencies and educational settings).

Other approaches to community education included the limited use of print and electronic media, and the setting up of public meetings in conjunction with local government agencies, where the overt agenda focussed upon such issues as childrens' reactions to disaster, family stress and parenting issues. These meetings provided a valuable forum at which the problems and issues facing the community could be discussed. An innovative approach in one area was the publication of a regular newsletter providing updated information regarding grants and services. Mental health staff participated in the production and prepared articles about normal stress reactions with advice on how and when to seek professional assistance. This approach provided a supportive link in a dislocated community.

Primary consultation.

The provision of primary care to individuals was a role common to all mental health teams. Some teams actively encouraged referrals for primary consultation as a means of establishing a secondary consultative network. Others downplayed their primary care role, preferring to support local agencies in dealing with problems and only accepting referrals of the most difficult cases. Many of the early referrals were child centred and, in some areas, specialist child psychiatric teams were called out to augment the existing mental health workers.

Footnote 1 After the Crisis is Over, Dr Julie Jones, Royal Childrens Hospital; Reactions You and Your Children May Experience as Fire Affected Persons, Dr Paul Valent, Prince Henry's Hospital.

Referral sources were multiple. One team established a strong link with the local general practitioner who was overwhelmed by the number of individuals perceived to require emotional support. This provided an interesting contrast to several other areas where general practitioners fiercely guarded their clientele from the mental health team and publicly prided themselves in being able to deal with all aspects for assistance. It was important for those teams not to rely on a single referral source and, in time, referrals were received from agencies such as community health centres, district nurses, welfare staff, schools, early childhood services and so forth. Some non-traditional sources of referral developed, particularly from informal leaders who had an intimate knowledge of their own communities. For example, in one area the local postmaster proved a valuable source of identifying, from the many individuals who discussed their situation with him, those who he believed to require professional counselling and referred them to the team. In the majority of instances his judgement was supported by the team staff.

The major issue facing the teams concerned the level of formlity to be adopted when providing a direct clinical service. Most teams decreased their usual level of formality and consultations were provided in temporary homes, meeting places, pubs and other equally unlikely venues. Typically, the client and professional were on first name terms and records were not maintained unless a formal psychiatric referral was necessary. When an office based consultation was required local facilities such as community centres, early childhood agencies, or bush nursing hospitals were used.

The approach of one group provided a strong contrast to the informality of other teams. Essentially, this group established an on site outpatient service, housed in a caravan which bore the title "Stress Counselling Service". It was anticipated that individuals could be seen on an appointment or drop-in basis within the caravan. Few people made an approach to the service and those who did largely presented with requests for practical aid. The implications or the failure of this on site receiving facility will be taken up at a later point in this paper.

Secondary and Tertiary Consultation

Secondary and tertiary consultation to local agencies formed about 60% of the work of the mental health professionals. When the ambivalence of local workers to outside agencies was successfully resolved, productive working relationships developed and also made apparent the significant stress upon local workers. The case consultation format provided a valuable and informal avenue for consultants to give counselling support.

Coordination of Services

The consultative roles of mental health professionals highlighted a need for coordination of the many agencies involved in the psychological component of community recovery. In an attempt to promote the sharing of information and maximise the use of local resources, two teams facilitated the establishment of coordination meetings between local helping agencies. The meetings were convened primarily as an efficient method to provide secondary consultative input, but they served several more indirect but important purposes. In drawing workers together, the meetings encouraged agencies to redress the lack of differentiation of roles and enabled a more comprehensive assessment of community needs. They also provided a forum for the resolution of interagency tensions arising from differences in approach and an opportunity for local workers to discuss the stresses arising from their daily work. The network that developed around health and welfare personnel provided valuable assistance in the planning and integration of approaches to community recovery.

A more informal approach to coordination was adopted by another team where pre-disaster community factions and schisms hampered their work. Sharp conflicts between the local general practitioner and welfare providers disrupted reconstruction planning and threatened to spread into the wider community. Through a low-key approach, liaising between the protagonists, the mental health team assisted in resolving the differences, and encouraged the communication of information that was essential to the planning process.

Debriefing support to Volunteers and Combatants

Apart from two exceptions and the general consultations provided to local health workers, mental health teams overlooked the psychological needs of workers from counter-disaster organisations, particularly the fire fighters and volunteers who worked at the scene. In one case, a mental health team provided assistance in the management of a number of workers who, by the second week, were displaying behaviours described by the "disaster syndrome". Most of these were locals who had been through the fires themselves and had initially taken charge of emergency operations. Although their continued involvement and impaired judgement caused major problems to the delivery of material aid, they were unwilling to relinquish their roles and welfare organisers were reluctant or unable to relieve them of duties. Through the contact made by their early involvement in the relief programme, the mental health team was able to sensitively intervene by encouraging the individual to talk through his experiences, and to take a rest period. In another fire-affected area, the mental health team organised a debriefing evening for fire fighters and their families. Information was presented on the typical stress reactions likely to be experienced in order to stimulate discussion within the group on the personal impact

of events that had been experienced. Although a minimal intervention, the work of this team represented the only formal approach made to disaster combatant personnel involved in the fires of Ash Wednesday.

TOWARDS A CONCEPTUAL MODEL FOR MENTAL HEALTH INTERVENTION

The tendency to "reinvent the wheel" in disaster planning has been commented upon in numerous papers (eg Heffron, 1977b). Twelve months after the fires it was apparent that the path travelled and problems faced by Victoria's mental health services paralled those described in earlier published accounts of large scale disaster programmes. As such, the experience highlighted directions that must be taken in planning a statewide disaster capacity.

Victoria's mental health response to Ash Wednesday evolved in the absence of a clearly defined model for intervention. As the services attempted to clarify their roles vis-a-vis other relief agencies, ideological differences about the objectives, nature and scope of disaster relief were brought into sharp focus. A clear rationale for mental health intervention and an established set of principles to guide the interactions of the team with the disaster-affected community were required. Our experience of Ash Wednesday identified four major concepts basic to the planning process.

Community Sanction

The need for community sanction of mental health services, that has been stressed by American workers (Cohen and Ahearn, 1980; Zarle et al. 1974) was keenly felt by Victoria's mental health agencies. Major concern that mental health teams would interfere with community-generated self-recovery emphasized the need for services to have as their primary objective, the support and strengthening of community agencies, and to accept direction from local bodies.

Previous authors have stressed the need for mental health interventions to be tailored in accordance with the particular nature of each individual community, with great sensitivity to local power structures and resource networks (Baisden, 1979; Taylor, Ross & Quarantelli, 1976; Cohen & Ahearn, 1980). The general observation has been made that communities in disaster tend to look to themselves for initial help and direction, rejecting imported services in lieu of more familiar persons and groups (Zarle et al, 1974). Mental health professionals can have been described as at their worst having a tendency to impose themselves as self-designated experts on local communities, and to provide unsolicited advice on the management of disaste-related problems. Efforts to transpose themselves as selfdesignated experts on local communities, and to provide unsolicited advice on the management of disaster-related problems. Efforts to traditional clinical models of mental health service delivery to disaster affected communities have been described as meeting with total failure (Taylor et al 1976).

In Victoria, inadequate attention was paid in the initial phase to the manner by which the teams gained entry to the fire-affected communities. The centralised decision made by the administrators of the State's mental health and welfare organisations, that mental health teams would operate under the authority of the local welfare coordinating body, was administratively convenient, but did not constitute community sanction of the services, nor did it clarify the relative roles of imported mental health teams and local agencies. The convergence of helpers and confusion of responsibilities that characterised the post-impact period made clear that to by-pass these difficulties, mental health services must be built into the disaster planning frameworks developed at the shire and local muncipality levels, where debate on models and intervention and acceptance of mental health participation can best occur. Moves are now underway in Victoria to ensure mental health representation at all levels of the State disaster planning process.

Involvement with Outreach Programmes

The value of an outreach approach to disaster affected individuals has been described on many occasions by workers experienced in disaster relief (Heffron, 1977a; Frederick, 1977; Zarle et al, 1974; Howard & Gordon, 1972; Raphael, 1979/80). The central objective of an outreach programme, to take services directly to individuals in an early intervention approach, assumes that many individuals will be in need of assistance, but are unaware of or unable to use the services available (Heffron, 1977a).

The passive stance adopted in the early post-impact phase may have been appropriate in view of our lack of preparation, but is obviously unacceptable as a general principle. The failure of traditional modes of mental health service delivery was also obvious at an early stage. On-site outpatient facilities, reliance upon formal referral and use of mental health terminology have been noted by previous workers to be counter-productive and likely to trigger resistance within a disaster affected population (Heffron, 1977a; Frederick, 1977; Okura, 1975).

Mental health professionals can take a variety of roles within outreach programmes. However, it is both impractical and inappropriate for them to attempt comprehensive primary contact with all the disaster affected. Workers such as Heffron (1977a) and Zarle et al (1974) have stressed the value of using supervised non-professionals for post-disaster outreach. Within their programmes, the mental health team selected, trained and monitored the work of the outreach staff. Victoria's outreach

programme was however initiated independently of mental health staff. Rather than training volunteers in crisis counselling theory, church-affiliated individuals, both Local and external to the disaster area were selected for outreach work on the basis of their personal qualities. The approach had the advantage of strong community sanction, and provided an acceptable point of entry for mental health teams to participate in community-led preventative work.

An attempt by one mental health team to initiate an independent outreach programme caused considerable conflict with a second team operating in the same area, but drawn from a different agency. The former group believed that the referrals coming across from the church outreach programme were somewhat arbitrary, and after preparing their own lists of affected persons, commenced a programme to make direct contact with as many residents as possible. The second agency regarded this approach as too instrusive and disregarding of previous visitations. It was considered that a too obvious presence of mental health services would imply pathology in normal grief and loss reactions. The former group believed the other agency to be too conservatively opposed to an outreach model and to have a too narrow view of mental health needs.

Conflict about planned outreach services also occurred within disaster relief agencies following the Tasmanian bushfires of 1967 (Wettenhall and Power, 1970, and has been discussed by Heffron (1977b). While the inter-agency conflict in the Victorian situation had other causative factors, it served to emphasize the need for mental health professionals to actively participate, in a clearly defined way within future outreach work. Planning must achieve a balance between agressive outreach services and a respect for community self-healing and avoidance of service convergence. In Victoria, the need for mental health consultative support to the outreach programme has been recognised at State planning levels and all regional mental health units are now required to jointly participate in the development of local outreach plans. Some agencies, including those uninvolved in the Ash Wednesday programme, are well advanced in this activity.

The Value of Multi-Modal Approach

Our experience identified a need for a multi-model approach by the mental health services, that anticipates the variety of - roles required. Cohen and Ahearn (1980) and Raphael (in press) have discussed the diversity of consultative and educational roles that can be performed, but have stressed the need to adapt the services in response to changing needs of the community. While the Victorian teams attempted to develop a range of services, most tended to concentrate on one or two role components, usually the primary or secondary consultative aspects of their work.

Only two of the teams gave detailed consideration to phasing out their services according to need. Withdrawal of those services was not achieved according to pre-determined timetable, but on the disappearance of significant disaster-related needs and demands.

Defining the Disaster Affected Population

An adequate conceptual model of mental health intervention in disaster defines the population potentially in need of services and identifies the specially vulnerable sub-groups. The mistake made in Victoria was one of too narrowly defining the disaster affected population and not developing adequate outreach procedures to take services to high-need target groups. Generally, the services were oriented to those many families and individuals who suffered property losses and who had returned to their burnt-out blocks to rebuild. Apart from specific attention to the needs of children, the special needs of other groups identified as "at risk" by researchers (National Health and Medical Research Council, 1983) were overlooked. Teams were not located at casualty receiving hospitals to deal with burns victims and their relatives. Similarly, efforts were not made to contact the many individuals and families who lost relatives and friends in the fires.

Apart from the approach made by one team to local fire fighters, specific services were not offered to the emergency service organisations involved in combating the fires. In one sense, popular images of "victims" and "helpers" (Short, 1979) prevailed, despite the considerable evidence suggesting that psychological after effects of disaster are present in many workers involved in rescue and recovery operations (Raphael, Singh and Bradbury, 1980; Raphael, Singh, Bradbury and Lambert, 1983/4; Taylor and Frazer, 1982). However, two major strategic problems also impaired service delivery to these groups. The first concerns volume. More than 15,000 Victorian volunteers were directly involved in combating the Ash Wednesday fires, along with hundreds of other emergency service personnel who played vital and, at times, life threatening roles. The second problem relates to the tendency within these organisations, particularly at senior administrative levels, to construe the need for psychological assistance as symptomatic of psychological instability or unsuitability for the work. Careful negotiation with these administrators is required before any offer of assistance would be genuinely accepted.

Since Ash Wednesday, the psychological needs of emergency service personnel have now been acknowledged within the State Disaster Plan, and the principle established that mental health teams active in future disasters should be made equally available to both the direct and the indirect victims of disaster. Following the suggestions of Raphael et al (1983/4), negotiations are underway with the leaders of several of the disaster

combatant organisations to use mental health professionals as consultants for the incorporation of a psychological component into their more usual organisational debriefing framework.

BUILDING AN ORGANISATIONAL FRAMEWORK

The critical importance of the pre-disaster organisational framework in which mental health services are provided was again emphasised by Victoria's recent experience. The lack of an adequate mental health disaster plan did not prevent service provision, as it also did nor in the Granville disaster of 1977 (Down, 1983) or the Indiana tornadoes of 1974 (Zarle et al, 1974). However, many problems were created that could have been circumvented by a clear and efficient disaster relief framework. Neither the good intentions nor the competence of individuals in the mental health area are enough to ensure an adequate response. Where there are systemic and organisational weaknesses in plans, they have to be addressed and cannot be overcome by goodwill, ad hoc decision making, dependency upon friendship ties or a hope that abstract professional knowledge will transform itself into meaningful, practical services.

Our recent experiences suggest that these are four priority areas for the development of an adequate counter-disaster framework by providers of mental health services in Australia.

1. There must be adequate mental health representation within the executive structures of the State's disaster coordinating body. As all planning, coordination and training emanate from the State master plan, a strong mental health presence at this level is necessary to integrate mental health programmes with other aspects of disaster relief. Mental health representation is also required to counter the preoccupation often found at this level (Wettenhall and Power, 1970) with combat and rescue issues to the exclusion of longer term aspects of community and individual recovery. Through an involvement in the chain of command, roles and responsibilities of various agencies can be defined, and the work of those agencies coordinated in order to minimise the risk of inter-agency conflicts.

2. Mental health services must be built into the longer term welfare support and community recovery programmes developed at state level. The Victorian experience demonstrated a basic affinity between mental health and welfare organisers in terms of the objectives of their disaster work. Mental health programmes to large scale community disasters are best delivered within a practical welfare context and this does not occur if they are only seen as a specialist sub-component of medical disaster planning.

3. Disaster planning must extend to all mental health agencies within the state network, and not be confined to a specialist, centralised group. Preparedness for disaster in Australia must come to grips with the fact that each year, whole communities are threatened by large scale natural disaster such as flood, fire and cyclones (Carroll, 1977). The centralisation of expertise within a small group of mental health professionals cannot meet the demands that arise from these calamities. An adequate organisational framework for disaster requires that, where there exists a capacity for disaster, relevent mental health teams must be involved in pre-disaster planning. It is therefore necessary to assist each agency in the development of detailed plans, similar to those that have been prepared for community mental health facilities in the United States (eg Heffron, 1981; Meyer, Lewis & Paskeoff, 1980; Cohen & Ahern, 1980). These plans should define roles and responsibilities within the agency, identify tasks to be performed by the team, and provide guidelines in the selection and training of staff. This approach implies that the best starting point for building a mental disaster plan is at the grass roots level.

4. Mental health disaster plans must be flexible and adaptive to meet the unique aspects of each disaster. The tendency to "plan for the last disaster" must be counteracted by an anticipation of the multi-variability of disaster. Disasters which involve widespread destruction of property but only a limited loss of life, have different implications for the roles and functioning of a mental health team from those disasters that threaten or take a large number of lives but have only a minimal welfare component.

The major value of Victoria's experience of Ash Wednesday, from an organisational point of view, has been the acceptance and integration of these principles into disaster planning arrangements. The experience stimulated the growth of awareness of the potential disaster roles within the State network of mental health agencies, and action is underway to assist those agencies in their preparations. The specific objective is to promote the formation of small crisis and disaster teams within each mental health unit, firmly embedded within regional disaster planning networks. State disaster plans have also been amended to allow adequate mental health representation, and to fully integrate mental health agencies within a medical and a welfare context. The challenge now is to maintain the momentum and interest generated by recent events.

DISASTER RESEARCH AND POLICY FORMATION

We will conclude with some comments on the need to bridge the gap that exists between research on human behaviour in disaster

and disaster policy formation.

Commenting on the lack of research into international disaster relief for developing countries, Taylor (1979) has suggested that lack of knowledge is not the prime obstacle in advancing the cause of disaster prevention and mitigation. Rather, the problem is one of applying the knowledge that already exists. A similar observation can be made about human behavioural disaster research. Attention must be given to increasing the impact of research knowledge upon the design and management of disaster relief programmes. To achieve this, a formal link between research and disaster relief workers must be forged. In the recent Victorian experience, disaster researchers and mental health service providers operated independently, and both groups suffered in different ways. From a service provider's point of view, resources were unavailable to mount appropriate research programmes, and many invaluable research opportunities were missed. At the central level, no specific arrangements were made for the collection of data that could be used for evaluation purposes and it is with considerable regret that we are unable to provide any quantitiative information on the work and effectiveness of the mental health teams. From the researcher's point of view, a closer link with service providers could allow their research to be built within the health and welfare response, providing it with a certain legitimacy and a channel for advocacy for the research objectives. Such a link would reduce the suspicion and hostility that was directed at research workers and help overcome the logistical problems involved in mounting programmes in the aftermath of disaster. To fantasize a little further, through the cooperation between service providers and researchers, a "standby research capacity" could be developed at a planning level, and readily mobilised at the time of disaster.

The overall goal then , is for research to be regarded as a necessary and integral component of the relief operation. Through this means, research data can be made more accessible to the planners of disaster policies and, in turn, shape the style or services that are provided to the community.

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