

# A framework for health promoting emergency departments

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## SUMMARY

Since 1986, the World Health Organization (WHO) has been advocating for the health sector to move increasingly in a health promotion direction, beyond its responsibility for providing clinical and curative services (WHO, 1986). Some Emergency Departments (EDs) have partially achieved this through providing patient health information, screening and early intervention programs, injury prevention and asthma education. While EDs are a suitable setting for health promotion, they are grounded in a medical paradigm where most of the staff are educated to think exclusively of relation care. As such, a significant organizational shift is required for EDs to be more inclusive of health promotion principles. Following a comprehensive literature review, a theoretical framework was developed for the Health

*Promoting Emergency Departments Program (HPEDP). It describes the opportunities for health promotion in EDs through combining the 'strategies for health promotion' with the 'spectrum of health and disease'. This forms a matrix to enable health development, primary prevention and secondary prevention interventions to be planned in EDs. The framework is a tool to support the development of coordinate and comprehensive health promotion programs and to avoid the use of isolated victim-blaming strategies. Beyond EDs, planners in other health care institutions may also find the framework useful—particularly those settings where staff health promotion training and experience is limited.*

*Key words:* emergency department; framework; health promoting hospitals; health promotion

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## INTRODUCTION

Since 1986, the World Health Organization (WHO) has been advocating for the health sector to move increasingly in a health promotion direction, beyond its responsibility for providing clinical and curative services (WHO, 1986). The international health promoting hospitals movement has made a serious attempt to incorporate the concepts of health promotion into hospitals' structure and culture by means of organizational development (WHO, 1991). Emergency departments (EDs) do not seem to have been systematically engaged by this movement. Yet many American, and to a lesser extent Australian, UK and Canadian EDs have been able to develop

their own health promotion niches, typically in relation to the following.

- Patient health information: written and audio-visual materials, discharge planning and telephone advice (Zimmermann, 1994; Jolly *et al.*, 1995; Spandorfer *et al.*, 1995; Turner, 1996; Williams *et al.*, 1996; Berger *et al.*, 1998; Duffy and Snyder, 1999).
- Screening and early intervention programs: for alcohol abuse, domestic violence and women's cancers (Conigrave *et al.*, 1991; Bates *et al.*, 1995; Hotch *et al.*, 1995; Mandelblatt *et al.*, 1996; Lockhart, 1997; Ward and Proude, 1999).

- Injury prevention (Baillie, 1994; Garrison *et al.*, 1997; Bateman and Wright, 1999).
- Asthma education (Shields *et al.*, 1990; McGillis, 1996; Partridge *et al.*, 1997).

As McKenna identified (McKenna, 1993), the role of the EDs is to provide treatment and care for acutely ill and injured people, promptly and at any time of the day. Surprisingly, this downstream focus enables the ED to be a suitable setting for health promotion for several reasons: (i) health promotion and emergency medicine generally share similar goals for the improvement of individuals' and communities' health; (ii) they are a credible source of health information; (iii) they have existing infrastructure for health promotion (planning processes, professional alliances, community networks) (Bensberg, 2000a); and (iv) they are an established entry point to the health system (Goel and McIsaac, 2000; Johnson, 2000).

EDs could offer solutions for addressing some health inequalities. McKenna found that a disproportionately high number of people who are unemployed or homeless visit EDs and do not attend any other primary care services (McKenna, 1993). This is also true for many males.

EDs are naturally grounded in a medical paradigm that will require a significant organizational shift to be inclusive of health promotion principles. The goal of the Health Promoting Emergency Departments Program (HPEDP) is for EDs to advance the health of individuals and communities by achieving organizational approaches to health promotion.

This paper describes a health promotion intervention in seven suburban hospitals in Australia. These EDs make up the HPEDP, where they participate in collaborative health promotion projects, involving the seven sites, as well as individual site projects. Before the program commenced, a framework was developed to describe the health promotion interventions that EDs could facilitate. The objective of this article is to document the theoretical 'Framework for Health Promoting Emergency Departments'.

## METHODS

More than 140 research papers were identified through the comprehensive literature review. Eighty-five per cent were obtained from peer-reviewed journals, and other documents were

also located. Numerous data bases were utilized, including Medline Express, Health and Society, CINCH-Health, AMI, CINAHL, APAIS-Health, Pubmed, and Ebscohost full text. The aim of the search was to identify the opportunities for health promotion in EDs. Search terms included:

- 'emergency department' or 'trauma centre' or 'emergency medicine'
- 'health promotion' or 'prevention'
- a range of risk factors (such as 'smoking', 'alcohol abuse', 'violence'), diseases (such as 'asthma', 'cancer') and health issues (such as 'injury', 'inequalities', 'child abuse'), or hospital processes (such as 'discharge planning', 'telephone advice', 'screening').

For example, the key words of a typical search were: 'emergency department' and 'health promotion', or 'prevention' and 'asthma'. More than 80 combinations of key words were searched in the English literature between 1980 and 2000. The findings of this review were used to map potential health promotion strategies that could be feasibly facilitated by EDs and subsequently to develop a theoretical framework for health promoting EDs.

## RESULTS

### Strategies for health promotion

Bensberg's model of 'Strategies for Health Promotion' (Bensberg, 2000b) (see Figure 1) was used to define the range of health promotion approaches available to EDs. This was originally developed to illustrate health promotion principles and practice to ED staff. It aimed to assist with their understanding of the options for integrating health promotion into their workplace.

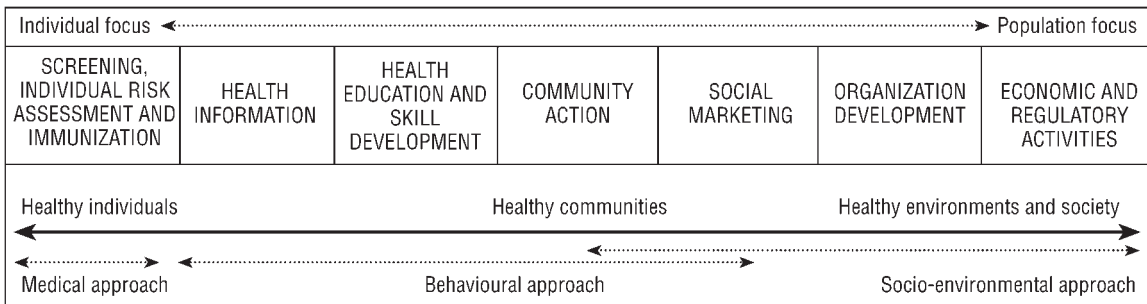
The model displays seven standard health promotion strategies and their relationships to:

- an individual or population foci;
- medical, behavioural and socio-environmental approaches (see Table 1); and
- the context for health gain (individual, community, society).

The strategies and examples of how they have been applied in EDs are described below.

#### 1. Screening, individual risk assessment and immunization

Screening and individual risk assessments aim to identify people who have elevated risk factors for



**Fig. 1:** Strategies for health promotion (Bensberg, 2000b).

**Table 1:** Approaches to health promotion (O’Conner and Parker, 1995)

Approach	Details
Medical (or preventive medicine) approach	Directed at improving physiological risk factors such as high blood pressure or cholesterol, lack of immunization, early cancer detection
Behavioural (or lifestyle) approach	Directed at improving behavioural risk factors such as smoking, poor nutrition, physical inactivity, drink driving
Socio-environmental approach	Directed at improving risk conditions such as poverty, low education, insufficient income, unemployment, inadequate housing

different diseases. Once the early stages of disease have been identified, advice can be sought on curing or preventing it from progressing. Immunization aims to reduce the spread of communicable diseases. In EDs and other health care settings, these health promotion strategies are often referred to as ‘opportunistic’, meaning that a chance has arisen to administer preventive health care during a clinical visit triggered by another (perhaps related) health issue. Some examples of coordinated strategies in EDs include:

- Screening young people (16–24 years) for their levels of alcohol consumption and identifying those at risk who would benefit from a brief intervention (Thom *et al.*, 1999).
- Cervical smear reminders for un-screened women who were seen as non-acute cases and would benefit from a brief intervention (Ward and Proude, 1999).

**2. Health information**

Information aims to improve peoples’ understanding about the causes of health and illness, the services and support available, and personal responsibility for actions affecting their health. Improving people’s access to health information enables them to make informed choices about

their behaviours and use of health care services. EDs are existing providers of health information. In addition to the range of posters and brochures that EDs offer, some examples of coordinated strategies included:

- screening of television health promotion programs in the hospital waiting room to improve parent’s knowledge of child health issues (Cockington, 1995);
- an ED initiated a hospital review process (including guidelines) for developing written health information for clients (Johnson, 1997); and
- triage nurses provided health information to parents who were high users of emergency paediatric services (children <13 months), including a follow-up appointment after discharge from the ED (Chande and Kimes, 1999).

**3. Health education, counselling and skills development**

Health education and skills development aims to help people live healthier lives. The intention is often in relation to supporting individuals in their behaviour change. Counselling provides similar support. EDs have been used as a setting for numerous health promotion strategies involving

health education, counselling and skills development for a range of individual risk factors. Some examples of coordinated strategies have included the following.

- Patients with alcohol-related problems (identified with a screening tool) provided with written and verbal advice, a brief intervention, and referral to alcohol services (Lockhart, 1997).
- To reduce ED admissions for asthma, nurses were provided with in-depth education of its management. Patients were then provided with comprehensive training in using their medication and follow-up telephone calls were made to support these patients further (McGillis, 1996).

Two strategies were directed at broader public health issues.

- The waiting room of an ED was used to promote reading and literacy to children. Children received books and reading assistance (as described in a letter dated 21 March 2000 from Ms H. Russell, Royal Women's Hospital).
- An ED worked with a primary school to increase students' awareness of safe cycling. Educational materials were developed and a series of visits to the school were conducted (Bateman and Wright, 1999).

#### 4. Community action

Community action aims to empower people to gain control over decisions affecting their lives in their community and larger society (social and environmental). They encourage communities to use their own resources to develop and sustain health promotion action. ED initiatives include the following.

- Trained community volunteers attend the ED during busy times to support patients and people in the waiting room. They also act as patient advocates on non-medical issues (Johnson *et al.*, 1993; Mickelson *et al.*, 1996).
- ED staff conducted their own survey to look at levels of violence in the department. In response to the survey findings they developed a staff safety program (Saines, 1999).

#### 5. Social marketing

Social marketing aims to influence public opinion and large numbers of people's behaviours by encouraging various health related actions. Social marketing is based on traditional marketing methods that advertising uses, but to 'sell'

a health message and inform individuals about healthy lifestyle choices. Social marketing campaigns are usually controlled and funded by state-wide health promotion agencies. It is unrealistic for EDs to operate at this level and their most useful role in social marketing is to develop a local response to state-wide initiatives, such as EDs who support campaigns like 'Hot Water Burns Like Fire' or 'Never Shake a Baby'. Emergency staff can compile brochures, posters and local media releases to complement the broader media activities.

#### 6. Organizational development

Organizational development aims to create a supportive environment for health promotion activities within agencies by building sustainable skills, resources and commitment to prevention. Health promotion then becomes an integrated part of an organization and not a side issue. To embed health promotion into EDs, the following coordinated strategies have been conducted.

- Introduction of a protocol (recognition, interviewing, assessment, interventions of health education/safety planning, referral, follow-up) and staff training (medical, nursing and administrative staff) for partner abuse in EDs to improve the management of abused women (Fanslow *et al.*, 1998).
- Changing hospital systems to support health promotion, e.g. including health promotion in the hospital mission statement and job descriptions, establishing a health promotion committee, and having dedicated funding and staff for health promotion (Johnson, 1997).

#### 7. Economic and regulatory activities

Economic and regulatory activities aim to create environments (societies and settings) that promote and protect health. The ED workforce have been involved in regulatory activities such as:

- emergency doctors preventing accidents have involved children by lobbying members of parliament to influence seat-belt legislation and public opinion, and developing epidemiological research (Peterson *et al.*, 1999); and
- emergency physicians and surgeons were amongst the earliest groups to advocate for action to reduce road crashes, raising public awareness of the nature and extent of the problem (National Health and Medical Research Council, 1996).

As defined by the WHO (1998), ‘advocacy for health’ includes individual and social actions to gain political comment, policy support, social acceptance and systems support for a particular health goal or program. Advocacy may be taken by and/or on behalf of individuals and groups to create living conditions that are conducive to the enhancement of health and the achievement of health lifestyles. It is a major strategy for health promotion, but is not listed as an individual strategy within the model as it takes many forms. Advocacy may involve the use of mass media and multi-media, direct political lobbying and community mobilization, and is consequently a method of community action, social marketing, and economic and regulatory strategies.

**Framework for Health Promoting EDs**

Irwin and Brown’s ‘spectrum of health and disease’ categories (optimal health, wellness, illness, recovery) and ‘intervention classifications’ (health development and maintenance, primary prevention, secondary prevention, tertiary prevention; see Table 2) (Irwin and Brown, 1981) were utilized and adapted to describe the circumstances of potential health promotion campaigns emanating from EDs.

The unique feature of EDs as a setting for health promotion is that most people who enter EDs are ill or injured and they require prompt treatment (at any time). This is alluded to in the spectrum as ‘illness’ and in the intervention categories as the opportunity for secondary prevention. (After this, patients become well or require additional services such as entering another part of the hospital or accessing community-based services. Some die.) Thus, health promotion is

embedded in the context of the clinical system, which Goel and McIsaac emphasize as being essential if health promotion programs in medical settings are to be successful (Goel and McIsaac, 2000).

The spectrum of health and disease categories were combined with the health promotion strategies to create the ‘Framework for Health Promoting EDs’ (see Figure 2).

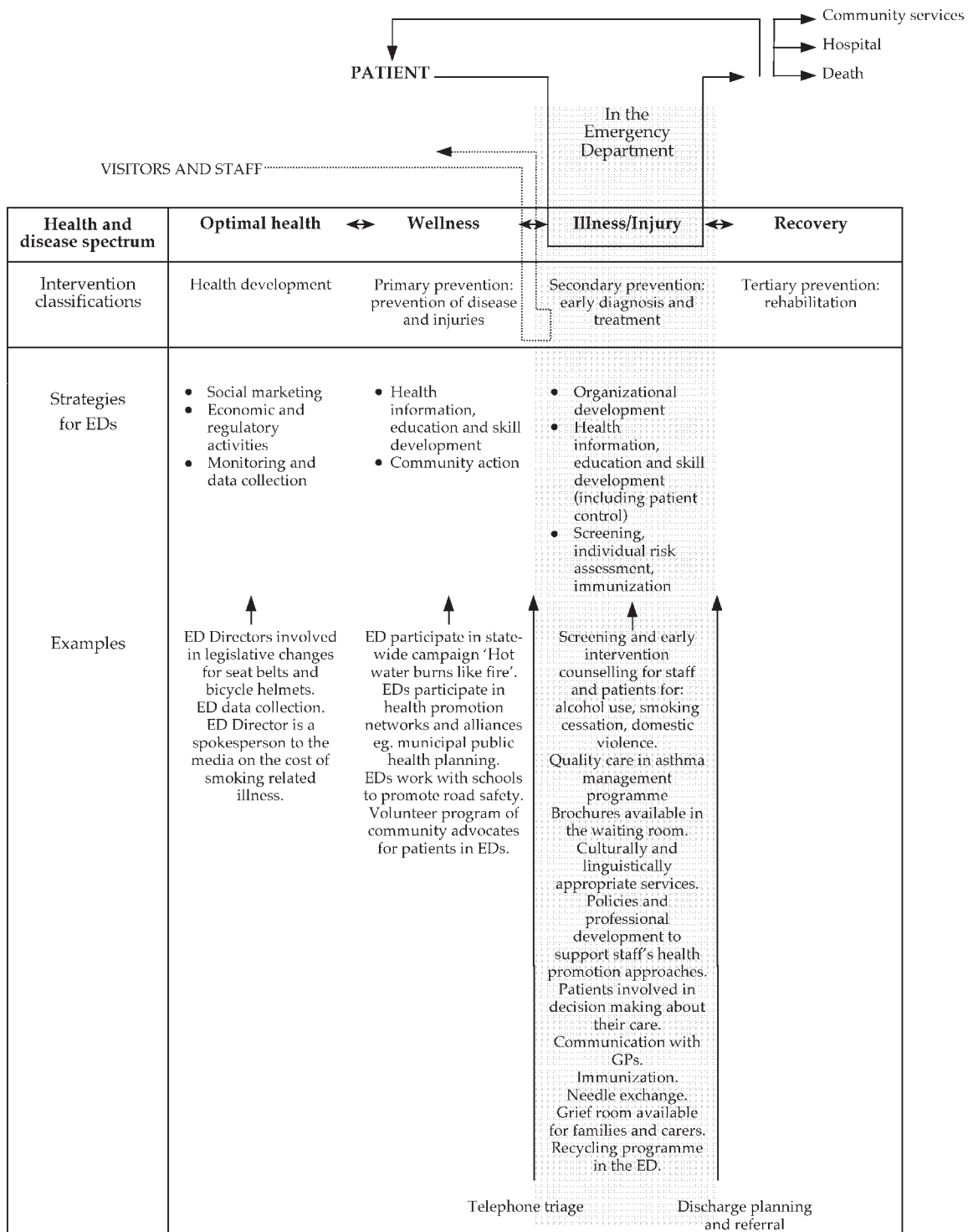
The framework maps potential health promotion strategies that could be implemented by EDs, across the spectrum of health and disease. It highlights and builds upon the existing role of EDs and care pathways and examines how these could be utilized in establishing health promotion programs and partnerships (with other hospital departments and community-based health services). It acknowledges EDs’ traditional roles in providing patients with health information and education in relation to local health services, lifestyles and disease management or injury. As well as their work in screening and risk assessments such as medical tests (blood pressure and cholesterol measurements) and behaviour change (cigarette and alcohol consumption), the framework builds upon these medical and behavioural approaches to expand ED opportunities, and considers socio-environmental approaches, such as advocacy for legislative changes and enforcement of seat belt and bicycle helmet use.

**DISCUSSION**

According to the World Health Organization (WHO, 1984), effective health promotion combines numerous strategies in complementary ways to address individual behaviours and structural

**Table 2:** Definitions of the intervention classifications (Bensberg, 1998)

Intervention	Details
Health development	Aims to create social, economic and environmental change that support population health. Examples include policies for taxation, education and transport [adapted from (Brown, 1985)]
Primary prevention	Aims to avoid disease or injury from occurring, by identifying and reducing communities’ and individual’s risk of exposure or behaviours. Examples include sunsmart and smoke-free workplace campaigns.
Secondary prevention	Aims to screen individuals for signs of disease in early stages and provide advice or treatment to cure it or prevent it from progressing. (Also referred to as preventive medicine.) Examples include blood pressure or cholesterol testing, breast and cervical cancer screening.
Tertiary prevention	Aims to prevent the re-occurrence of disease and limit disability or complications arising from an irreversible condition such as cardiac rehabilitation.



**Fig. 2:** The Framework for Health Promoting EDs.

conditions that create health. For example, Wass believes that health promotion action, including working for healthier public policy as well as developing the skills of individuals, addresses the structural barriers to ill health (Wass, 1994). The framework enables these complementary strategies to be developed by EDs. EDs can simultaneously undertake a range of health promotion strategies in relation to injury prevention (Garrison *et al.*, 1997a), including health development, and primary and secondary prevention (see Figure 3).

ED staff see many patients who have injuries. In addition to providing their treatment and care, they can contribute to:

- the availability of appropriate patient health information, especially to avoid recurrent

- injury by issuing injury prevention instructions, for example (Garrison *et al.*, 1997b);
- a protocol or committee to guide the ED’s involvement in injury prevention;
- interact with the media to promote injury prevention;
- collect injury data for planning and evaluating injury prevention campaigns; and
- participate in local injury prevention networks with other organizations (Baillie, 1994; Garrison *et al.*, 1997b).

Some EDs have developed their own innovative injury prevention programs. Coffman *et al.* described one ED’s use of helmet discharge plans for all children who are injured on a bike, skateboard or skating (Coffman *et al.*, 1998). Hansen and Shapiro described the initiatives an injury

..... In the ED .....

Health and disease spectrum	Optimal health ↔	Wellness ↔	Illness/Injury ↔	Recovery
Intervention classifications	Health development	Primary prevention: prevention of disease and injuries	Secondary prevention: early diagnosis and treatment	Tertiary prevention: rehabilitation
<b>Injury prevention strategies</b>	<p>Economic and regulatory activities:</p> <ul style="list-style-type: none"> <li>• ED interacts with the media on issues relating to road traffic accidents.</li> <li>• ED advocates for policy enforcement for blood alcohol levels, safety restraints and bicycle helmets</li> </ul> <p>Monitoring and data collection:</p> <ul style="list-style-type: none"> <li>• ED collate information on the type, severity and causes of injuries</li> </ul>	<p>Health information, education and skill development:</p> <ul style="list-style-type: none"> <li>• ED has a safety centre (with safe kitchen and household safety items) for community members to visit.</li> </ul> <p>Community action:</p> <ul style="list-style-type: none"> <li>• ED is a member of an alliance with other agencies preventing injuries in the local community</li> </ul>	<p>Health information, education and skill development:</p> <ul style="list-style-type: none"> <li>• Health information (brochures, poster, videos for loan) on injury prevention available in the waiting room.</li> <li>• Health education provide to parents of an injured child as part of discharge planning.</li> </ul> <p>Organizational development:</p> <ul style="list-style-type: none"> <li>• The ED has a policy and committee to support their injury prevention work.</li> <li>• Staff are provided with training and opportunities in developing health information and providing health education.</li> </ul>	

**Fig. 3:** Health promotion strategies in relation to injury prevention.

prevention coordinator employed in an ED, including working collaboratively with driver education programs and community groups (Hansen and Shapiro, 1996).

The changes necessary to establish health promoting EDs require a paradigm shift for medical professionals to apply health promotion principles. Johnson identified that this is a difficult change for those who have been educated to think exclusively in relation to illness care (Johnson, 2000). EDs could only feasibly achieve this shift if they are supported to do so. Both McBride and Stanton reported that the supports needed are: adequate staff time; training; materials; resources; funding; leadership and interest by relevant others; and for the intervention to be of interest to staff (McBride, 1994; Stanton, 1996). These support types are available in the HPEDP. Even with this assistance, however, McKenna fundamentally questions the appropriateness of a busy, noisy ED as a suitable environment for meaningful health promotion (McKenna, 1993). Yet, current conceptual changes in EDs suggest that there is consistency between the holistic nature of health promotion and the speciality of emergency medicine. Emergency medicine is becoming less 'encounter' focused and more systems focused, i.e. for trauma care, case management, community-based care and observation units (related to the evolving discipline of short-stay medicine). The implications of these organizational and attitudinal changes are that the systems of emergency care are centred on the total needs of the individual as a whole person—as recommended by the WHO in reorienting health services (WHO, 1986).

Most ED staff are trained in secondary prevention and early diagnosis of disease. The framework shows numerous roles for EDs through these health promotion strategies. Goel and McIsaac suggest that preventive medicine activities are suitable starting points for health care settings that are becoming health promoting (Goel and McIsaac, 2000). Doctors and nurses are comfortable identifying and treating disease and are skilled in blood pressure testing, cholesterol testing, breast and cervical screening. On the contrary, health care institutions have been criticized for focusing their health promotion activities on secondary prevention, rather than on structural conditions that determine health.

When secondary prevention is used in isolation, Dunlop considers it 'victim blaming', as the wider social and environmental influences on

health have not been taken into account (Dunlop, 1999). According to Hancock, these activities are disease based, directed at individuals and as such are not 'health promoting', but 'disease promoting' medical procedures controlled by health professionals (Hancock, 1994). Hancock would prefer that the language of health promotion be reserved for wellness-focused population approaches, underpinned by community development methods.

Johnson found that the health promoting hospitals' programs have largely focused on disease management and prevention (Johnson, 1997). The activities tended to be part of continuous quality management programs, rather than discrete health promotion activities. Yet when health development strategies are considered, the focus of programs shifts beyond the hospital walls. Hospitals' (including EDs) health promotion efforts can address the broader determinants of health and reduce the risk of implementing isolated victim-blaming strategies. For example, EDs are usually the first health service that abused children come in contact with (Sidebothman and Pearce, 1997). Doctors and nurses have a role in recognizing and reporting the abuse to protective services (Fagan, 1998). EDs have protocols for this and for handling suspected abuse, as well as training and updating staff. To prevent abuse, ED staff can raise awareness of child abuse in the community. Bethea recommends that they lobby for more accessible and affordable child health and care services in the community, thus influencing the determinants of health that are upstream and usually outside of the control of individuals (Bethea, 1999).

While the framework alludes to some possible partnerships for health promotion, it does not explore relationships outside of the health care sector. EDs could develop collaborative initiatives with other sectors that influence health, such as the police, schools, or private industry. This is a limitation of the framework that can be overcome if it is used in conjunction with the Budapest Declaration on Health Promoting Hospitals (WHO, 1991). The action statements of the Declaration reinforce that health promotion should be delivered in conjunction with governments and other existing services in the community.

Findings from previous work (Department of Human Services, 2000) stated that most of the documented health promotion in EDs is ad hoc and unlikely to be sustainable or evaluated. This is likely to be due to the limited planning and theoretical foundations that underpin these



activities. The framework is a starting point to improve this situation. The identification or development of additional guides for program planning and evaluation could further assist EDs in improving their health promotion efforts.

The framework is a tool to support the development of health promoting EDs. It will enable planners in this unique setting to design complementary and coordinated approaches to promoting health. Planners in other health care institutions may also find it useful, particularly those where most of the staff are trained in illness care rather than health promotion, such as general practice clinics or community health centres.

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