



Every Contact Counts: A review of evidence

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On behalf of Public Health Wales

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Summary

- Every contact counts encourages all public service workers to engage in provision of health advice to members of the public as part of their normal daily activity.
- This review uses information gathered from systematic reviews of evidence and other appropriate literature to assess the likely success of a programme of brief interventions to secure behaviour change leading to population health improvement.
- The available evidence suggests that brief interventions lasting up to half an hour can have an impact on health behaviour, particularly drinking and smoking. Evidence for other public health goals such as physical activity, diet and sexual health is less clear. Where it has been tested, brief interventions are shown to be cost effective.
- Brief interventions in primary care consultations are already a recognised part of good practice, however a good many primary care professionals feel insecure about undertaking brief interventions.
- Most professionals allied to medicine feel unprepared to give health advice in such situations. There is little evidence that professionals or other public service staff feel ready to undertake such action.
- It is essential that health and social care workers who undertake brief interventions with patients are properly trained to do so. Consideration should also be given to including health promotion training in the curriculum of professions allied to medicine in the future.
- There is a need for further research in this area, particularly on the role of non-professional staff in providing health advice. Pilot projects and/or implementation of this policy should be subject to rigorous evaluation of practice.

Background

The policy initiative 'Every Contact Counts' is an attempt to infuse each encounter between health and social care professionals and clients or patients with advice about potential behaviour change leading to healthier lifestyles and aiming to improve health in the future. This approach was recommended in an independent report 'Enabling Effective Delivery of Health and Wellbeing' in 2010 (Bernstein et al., 2010) and would help to build health literacy in the community (Berkman et al., 2011).

'Brief' or 'opportunistic' health promotion interventions have been acknowledged as effective in certain circumstances (NICE, 2006) and regarded as good practice among some health practitioners (Zwar et al., 2011), although they have rarely been included within curricula for professional training courses, particularly health professions allied to medicine (Gill and O'May, 2011). The new policy seeks to ensure that this becomes a routine component of consultation or other contacts. This paper reviews existing evidence for the policy, focusing on published systematic reviews. The website NHS Local (2011) sees the process in these terms:

"Anyone who has contact with members of the general public – nurses, doctors, firemen and women, porters, receptionists, policemen and women etc.

Whoever you are and whatever your role, you have an opportunity to improve other people's lives and help them to be healthier.

It's not about being a specialist but about knowing what the basic health messages are and knowing where to signpost people onto for further support." (NHS Local, 2011)

As such, it extends the expectation to contribute to health improvement beyond the ranks of professionals into professionals in other public service roles and to support and ancillary staff. This view of the delivery of services fits well into the framework of the 'Big Society' (Cabinet Office 2010), the most striking policy idea from the coalition government in Westminster. The 'Big Society' calls for involvement in communities, rethinking the provision of services and more say in government (Cabinet Office, 2010). In effect, this is not a completely new initiative, but draws on developing policy may aligned to notions of active citizenship which have been part of the UK government agenda since the nineties (Jochum et al., 2005)

This paper seeks to access, review and discuss relevant high quality evidence to provide advice to the Welsh Government on the potential for 'Every Contact Counts' to deliver improved health for the people of Wales. While the evidence presented in systematic reviews is derived from empirical studies, there is also a valuable contribution from studies of training, understandings and attitudes and exploratory studies of the field.

Brief Interventions

Health promotion is "the process of enabling people to increase control over and improve their health" (World Health Organisation, 1986 p iii). Opportunistic health promotion occurs when health promotion messages are delivered through the routine day to day contact between professionals and individuals in their community (World Health Organisation, 1998).

Some administrations make a distinction between opportunistic and planned health promotion (DHS, 2003). Opportunistic health promotion being undertaken as part of best practice service delivery during routine consultations or sessions, while planned health promotion involves project work or the development of relationships which take place over a longer term.

Some evidence from randomised controlled trials and systematic reviews (NICE, 2006; Fleming et al., 2010; Zanis et al., 2011) suggests that brief interventions by health professionals can alter the behaviour of groups within the community, however there appears to be little evidence that this facility extends beyond health professionals into other public services and no evidence that there is a potential role for support staff in these efforts.

According to NICE (2006) brief interventions involve opportunistic advice, discussion, negotiation or encouragement. They are commonly used in many areas of health promotion and are delivered by a range of primary and community care professionals. Brief intervention is a time-limited (between approximately 5 and 30 minutes) interaction/conversation between a practitioner and patient focused on addressing potentially harmful behaviour. The guided nature of the conversation, which is delivered in a motivational style, distinguishes a brief intervention from basic information provision, although providing information and written self-help materials for an individual to take away may form part of a brief intervention.

In the case of smoking cessation, brief interventions typically take between 5 and 10 minutes and may include one or more of the following:

- simple opportunistic advice to stop
- an assessment of the patient's commitment to quit
- an offer of pharmacotherapy and/or behavioural support
- provision of self-help material and referral to more intensive support such as the NHS Stop Smoking Services.

The particular package that is provided will depend on a number of factors, including the individual's willingness to quit, how acceptable they find the intervention on offer and the previous ways they have tried to quit (NICE, 2006).

According to SHAAP (Scottish Health Action on Alcohol Problems, 2008), more evidence for brief interventions exists for alcohol misuse than for other health issues. The consistent evidence from a meta-analysis of a large number of studies (Kaner et al., 2007) is that brief intervention in primary care can reduce total alcohol consumption and episodes of binge drinking in hazardous drinkers, for periods lasting up to a year. According to Kaner (2007), longer periods of counselling appear to have no more impact although in a meta-analysis of 14 studies, brief interventions as defined by NICE were out performed by longer interventions taking place over several meetings (Poikolainen, 1999).

Opportunistic health promotion has also routinely been included in policy and practice advice (West et al., 2000; Coleman, 2004). For example in smoking cessation practice, interventions delivered through the National Health Service are commonly viewed as an extremely cost effective way of preserving life and reducing ill health remains unchanged. The strategy recommended by the guidelines involves:

- GPs opportunistically advising smokers to stop during routine consultations, giving advice on and/or prescribing effective medications to help them and referring them to specialist cessation services;
- specialist smokers' services providing behavioural support (in groups or individually) for smokers who want help with stopping and using effective medications wherever possible;
- specialist cessation counsellors providing behavioural support for hospital patients and pregnant smokers who want help with stopping;
- all health professionals involved in smoking cessation encouraging and assisting smokers in use of nicotine replacement therapies (NRT) or bupropion where appropriate. (West et al., 2000)

Practice is encouraged by citing approaches through which smokers might be recruited and encouraged to pursue cessation strategies (Coleman 2004) following routine appointments where the opportunity is taken to broaden the scope of the consultation. However although brief GP interventions in the area of smoking cessation have been shown to have a small but significant impact (Coleman and Wilson, 2000), questions have also been raised about the wider effectiveness and ethics of such opportunistic health promotion (Summerskill and Pope, 2002; Getz et al., 2003; Proude et al., 2004; Ogden and Jain, 2005). Others stress that it needs to be connected to wider appreciations of culture and understandings of health and illness (Butler et al., 1998; Hunt et al., 2000).

A systematic review of qualitative evidence (Johnson et al., 2011) found that implementation was limited by lack of resources, training and support from management, as well as workload. Additionally, for the patient as well as the professional, the appropriateness of the context in which discussions took place was reported as an important factor. Evidence from another review found that a sizable minority of general practitioners have negative beliefs about discussing key lifestyle issues with patients (Vogt et al., 2005). Others go further, theorising that raising lifestyle issues in the consultation may be a disincentive to seeking future medical care (Richards et al., 2003). Among secondary care medical and surgical practitioners, there may be opportunities to advise patients about hazardous behaviour with direct reference to existing conditions. Research on the attitudes of gynaecologists finds that there is scepticism about the efficacy of brief interventions and that it has not yet become integrated into practice.

The delivery of a brief intervention will often occur in an opportunistic way, meaning that the patient will not specifically be seeking help. Studies of brief interventions for problem drinking suggest that extensive training is not required to carry out a simple brief intervention (Kaner et al., 2007). According to Kaner et al. (2007) one or two sessions of instructive and practical training should be sufficient for a practitioner experienced in managing consultations, with a good level of knowledge of the risks of hazardous/harmful consumption. However other approaches, such as behaviour change counselling derived from motivational interviewing may take considerably longer (Spanou et al., 2010). Groups of staff unfamiliar with counselling techniques, health promotion practice or lacking the basic knowledge may also need more concerted training. Training methods and the competencies acquired through training need to be carefully evaluated. In a Finnish study (Aalto et al., 2001), fewer than 20% of primary care doctors and nurses felt competent to deliver

brief interventions despite it being part of good practice, in other research, primary care staff in similar roles sought further training to be effective (Dunn et al., 2001).

Although general practitioners are an important group within the healthcare field, they are not alone in having on-going one-to-one health-related contact with citizens. One group that might be expected to readily engage in opportunistic health promotion is nurses, who have, through their training and practice, an understanding of health and disease issues and are viewed positively by patients. In a study of nursing practice (Casey, 2007) nurses struggled to describe their understanding of health promotion and their knowledge was rated as narrow and focused on the individual. The nursing literature is said to be short on good quality health promotion related literature (Nicholson, 2000) and that perceptions and descriptions of health promotion among nurses remain more in keeping with the traditional health education approach (Casey, 2007). While this may generally be in line with the requirements of 'Every contact counts', the need to be able to apply more complex health promotion practice might be expected of such a key professional group. Health promotion in Casey's (2007) was reported infrequently, and an add-on where time permitted. Time was seen as a significant limiting factor, while education, organizational and management issues were also identified as barriers to health-promoting nursing practice (Casey 2007). A WHO review of nurse participation in health promotion found that:

"It was clear that lack of confidence in assuming this secondary prevention role and insufficient knowledge and negative attitudes are key inhibitors of nurses' involvement in screening and brief interventions in this field." (Watson et al., 2010 p xii)

Effective training was however found to enable nurses to undertake more of a role in brief interventions and has to be considered an essential in developing this policy. The initial finding may also provide an insight in the readiness of other professionals, particularly those outside the health service to deliver opportunistic interventions with the necessary authority to improve health or address hazardous behaviours.

Among the allied professionals are pharmacists, a group of health professionals who appear to be in a good position to provide health advice opportunistically to their customers. A study of pharmacy service users found that they were willing to discuss drinking and accept written information from pharmacists and that accessibility and anonymity were positive aspects although concerns were expressed about lack of privacy and time (Dhital et al., 2010). Other research studies have also identified that pharmacists' willingness to provide such advice may be limited, particularly when customers are unknown to them or in the case of sensitivity of the issue concerned (Anderson and Rajaguru, 2002). A New Zealand study (Sheridan et al., 2008) of readiness to participate in brief alcohol interventions found poor levels of awareness among pharmacists of recommended limits or other relevant issues.

Traditions of practice in professions such as social work and social services differ markedly from those in primary care or other health services (Vickridge and Ayub, 2003). According to Vickridge and Ayub (2003), a process of empowering service users is incompatible with strict managerial control of professional practice and performance driven organisational structures. It does however

sit comfortably with approaches which emphasise partnership, with clients and across professional boundaries.

According to a recently published review (Verhaeghe et al., 2011), both mental health nurses and patients view towards health promotion targeting physical activity and eating habits positively. However there are several barriers for integrating healthy lifestyles into the daily life of patients. While patients want to learn more about healthy lifestyles, they see the ability to change their physical health as beyond their control. On the other hand, it has been concluded that community programmes (which may include rather more than brief opportunistic interventions, but may feature a role for trained lay health promoters) can have an impact on local rates of cardiovascular disease (Swider, 2002; Pennant et al., 2010).

This review focuses on low intensity interventions, however it may be useful also to consider the impact of lay health workers, who receive training in health promotion practice and interact with patients at higher levels of intensity. There is a long history of successfully involving lay workers in health improvement work, especially in disadvantaged areas and particularly in ensuring access to health services (South et al., 2010). Advantages of this approach include their ability to bridge to communities and their knowledge and experience which can complement or indeed challenge that of professionals (Popay et al., 1998; South et al., 2010). A review of 35 studies in the USA (Rhodes et al., 2007) found that in 14 of these studies lay health workers were judged as effective in delivering health promotion advice to Hispanic communities. These results may be of particular importance in disadvantaged communities, where lay workers have more knowledge and experience, as well as less social distance from patients. Evaluations of health trainers projects in the US and England (Rhodes et al., 2007; Visram et al., 2010; Ward and Banks, 2010) have found that while they have positive benefits, they also have on-going support needs and may have to modify their practice according to the needs of clients.

In a review (Foster et al., 2009), self-management education programmes led by lay leaders (rather than health professionals such as doctors or nurses) which have become common as a way of trying to promote self-care for people with chronic conditions were assessed about the effects of these programmes. While many of the seventeen programmes including people with chronic conditions were similar, they differed in which condition they were for, which measurements researchers reported, and how effective the programmes appeared to be.

These programmes may lead to modest, short-term improvements in patients' confidence to manage their condition and perceptions of their own health. They also increased how often people took aerobic exercise. Whilst there were small improvements in pain, disability, fatigue and depression, the improvements were not clinically important. The programmes did not improve quality of life, alter the number of times patients visited their doctor or reduce the amount of time spent in hospital, nor were longer term impacts assessed.

In a review of brief interventions within primary care, the long term effectiveness of advice on physical activity was questioned (Lawlor and Hanratty, 2001). Although there appear to be positive results in the short term, sustained increases in physical activity are not indicated. However, most of the studies included were from the USA and the authors question whether the results are applicable to the United Kingdom, where the structure of primary care is unique. They recommend further detailed research.

Search strategy

In order to understand the potential impact of 'Every Contact Counts', a review of the best available evidence was commissioned by Public Health Wales. A broad and inclusive search strategy was employed to identify and gather evidence. Initial searching of electronic databases including Medline, the Cochrane Library, Centre for Reviews and Dissemination, EPPI Centre, The Campbell Library, NICE and Google/Google Scholar used keywords including:

"Health promotion", "Health advice", "Health education", in combination with "opportunistic" or "brief interventions". To ensure that evidence involving other local staff was located, additional searches using 'local government', 'municipality', 'Social work', 'Social welfare' and 'social services' in combination with 'health advice' were also undertaken, with the search extending to titles, keywords and abstracts of literature.

Only those papers published after 1999 were included. Initial searches identified a total of 5591 papers. Of these, 531 were identified as reviews and screened for inclusion.

Reviews were excluded if they involved or appeared to involve health care interventions such as screening or infection control, did not concern health improvement advice or behaviour change interventions, did not cover brief (ie one-time and of under 30 minutes duration) interventions or were set in non-OECD countries. After screening, a total of 18 reviews were included in the analysis.

Supplementary searches included examining reference lists for review papers and grey literature. Advice was also taken from individuals who had contributed significantly to the literature.

Results

Of the 18 reviews included, the highest numbers concerned alcohol misuse (D'Onofrio and Degutis, 2002; Moyer et al., 2002; Bertholet et al., 2005; Vasilaki et al., 2006; Kaner et al., 2007; Nilsen et al., 2008; McQueen et al., 2010; Wachtel and Staniford, 2010; Sullivan et al., 2011), which also has the strongest evidence base (Scottish Health Action on Alcohol Problems, 2008). Other areas covered by the reviews included physical activity (Lawlor and Hanratty, 2001; Thomas and Fitzpatrick-Lewis, 2007; Carroll et al., 2008), domestic violence (Ramsay et al., 2009), smoking (Aveyard et al., 2011), substance misuse (Dunn et al., 2001; Kaner et al., 2011), sexual health (Scher et al., 2006) and coronary heart disease risk factors and general health (Fernandez et al., 2007; Rhodes et al., 2007).

While reviews were generally of good quality, there was often criticism of the quality of original studies. This was particularly the case for physical activity (Thomas and Fitzpatrick-Lewis, 2007) and substance misuse (Kaner et al., 2011).

All reviews, except Rhodes et al's review of lay health workers (2007) referred to professional led interventions, though in some instances this included a range of professional groups. Settings for the interventions included secondary care, the community and primary care.

Most of the evidence presented e.g. (Dunn et al., 2001; Lawlor and Hanratty, 2001; D'Onofrio and Degutis, 2002; Fernandez et al., 2007; Ramsay et al., 2009) indicates that brief interventions can be effective in changing behaviour and therefore can have positive benefits for health improvement. However, results from the reviews showed that the evidence for brief interventions across a range

of health promotion areas is equivocal. The strongest evidence is in alcohol misuse although some reviews temper their conclusions, finding that only certain categories of drinkers are positively impacted by brief interventions (Vasilaki et al., 2006; McQueen et al., 2010). Other work has suggested that in the long term, without reinforcement, brief interventions cease to have an impact on the level of drinking (Wutzke et al., 2002). In other health improvement areas, reviews conclude that behaviour change is not sustained, for example while the Lawlor et al (2001) review of physical activity found short term change, there was little evidence of long term increases in physical activity.

Results Table

Lead Author (date)	Type of Study	Health Focus	Patient Group	Professional group	Study Conclusions
Kaner (2009)	Meta-analysis	Alcohol consumption	General	General	Overall, brief interventions lowered alcohol consumption. When data were available by gender, the effect was clear in men at one year of follow up, but not in women. Longer duration of counselling probably has little additional effect.
Bien (2006)	Review	Alcohol consumption	Problem drinkers	Healthcare	There is encouraging evidence that the course of harmful alcohol use can be effectively altered by well-designed intervention strategies which are feasible within relatively brief-contact contexts such as primary health care settings and employee assistance programs.
Vasilaki (2006)	Meta-analysis	Alcohol consumption (motivational interviewing)	General	Not specified	Motivational interviewing is effective, particularly when dependent drinkers are excluded
MacQueen (2011)	Systematic Review	Heavy drinking	Admissions to hospital	Healthcare professionals	Evidence of reduced drinking following intervention, inconclusive evidence of longer term impact
Nilsen (2008)	Systematic Review	Alcohol misuse	Injury patients at A&E	Various – included computer-based intervention	Although favourable trends towards BI were observed, specific conclusions could not be drawn because of variations in study protocols, recruitment criteria for participants, screening and assessment methods, and injury severity.
Moyer (2002)	Meta-analysis	Alcohol consumption	Treatment seeking and non-treatment	Not specified	Brief interventions effective for those not seeking treatment for condition

Bertholet (2005)	Systematic Review	Alcohol misuse	seeking Drinkers attending primary care for other reasons	Primary care	This review investigated the efficacy of brief alcohol interventions (BAIs) for the reduction of alcohol consumption in patients attending primary care. The authors concluded that BAIs can be effective in reducing alcohol consumption, and their effects can last for 48 months.
D'Onofrio (2002)	Narrative Synthesis	Alcohol misuse	Attendees at hospital emergency department	Not stated	The authors conclude that they have demonstrated the efficacy of screening and brief intervention in A&E.
Sullivan (2012)	Systematic Review	Alcohol misuse	Primary care patients	Non-physicians	Non-physician brief interventions were modestly effective at reducing drinking in primary care patients with unhealthy alcohol use.
Wachtel (2011)	Narrative Synthesis	Alcohol misuse and binge drinking	Adolescents	Various	No single intervention could be confidently recommended due to confounding evidence. However, successful elements of past studies warrant further investigation; these include face-to-face, one-session, motivational interviewing-style brief interventions, focusing on harm minimisation and all with long-term follow-up.
Rhodes (2007)	Qualitative SR	General Health	Hispanic community	Lay health workers	Few rigorous studies were found on effectiveness of lay health workers on a variety of public health concerns. Authors conclude that the evidence base is inconsistent and stronger empirical evidence needed.
Fernandez (2007)	Systematic Review	CHD risk factors	Patients with CHD risk factors – primary prevention trials excluded	Healthcare professionals	This well-conducted review reported that there was inconclusive, but supportive, evidence to suggest that brief interventions in adults with

					coronary heart disease were effective in terms of risk factor modification and disease progression.
Carroll (2004)	Systematic Review	Physical activity	Individuals from minority ethnic backgrounds or vulnerable populations	Primary care physicians	Information on exercise counselling interventions for underserved populations in primary care was limited, although some studies showed promising results.
Thomas (2007)	Narrative Synthesis	Physical Activity	Disadvantaged Communities	Multi-discipline	Some successful programmes exist in Canada, but the quality of the evidence is poor and results are inconsistent.
Lawlor (2001)	Systematic Review	Physical Activity		Primary care	Opportunistic interventions found not effective in longer term
Dunn (2001)	Systematic Review	Substance misuse	substance abuse, smoking, HIV risk, and diet/exercise	Non-specialist clinicians	There was substantial evidence that MI is an effective substance abuse intervention method when used by clinicians who are non-specialists in substance abuse treatment
Kaner (2011)	Systematic Review	Substance misuse and physical/mental health problems	Substance misusers	Not specified	Brief intervention tended to produce positive effects in patients with substance use and co-morbid physical health problems. However, there was a limited amount of research work in this area. The evidence of positive brief intervention effects in patients with substance use and mental health problems or dual substance use was less convincing.
Aveyard (2011)	Systematic Review	Smoking	Smokers	Primary Care	Some effect in terms of reduction in smoking. Physicians may have more impact by offering assistance to all smokers than by advising smokers to quit and only offering assistance to those that express an interest in doing so.

Scher (2006)	Systematic Review and meta-analysis	Sexual health/ teenage pregnancy	Adolescents	Not specified/various	Too little evidence about one-time interventions. The most promising results are for the more intensive multi-component youth development programs serving higher risk adolescents. Moreover, within this category, the results tend to be most favourable for females.
Ramsey (2009)	Systematic Review and meta-analysis	Domestic violence	Women	Healthcare settings	There is evidence that brief advocacy increases the use of safety behaviours by abused women

Discussion

The provision of opportunistic health promotion is common in primary care and generally regarded as good practice, but tends to be limited to this setting and is mostly undertaken by GPs and community/practice nurses. Opportunistic health promotion is recognised as good practice for GPs (Hull, 2007) and nurses (Nolan et al., 1996), however all staff, including most GPs lack adequate training to deliver brief or opportunistic interventions effectively. Some staff, particularly among professions allied to medicine are also uncertain whether it is part of their job to deliver such services (Gill and O'May, 2011).

Literature on opportunistic and brief intervention health promotion in primary care concentrates on alcohol and smoking, perhaps an indication that GPs restrict their advice to areas where they feel most confident and are least likely to have an impact on the doctor-patient relationship (Butler et al., 1998) however some research has been undertaken in other areas. For example, a Northern Ireland study (Thompson et al., 2008) found that promotion of sexual health within the primary care setting is often ad hoc and often does not target the 'at-risk' population. As such, GPs and practice nurses tend not to discuss sexual health with non-heterosexual clients or those with learning disabilities. The study concluded that health professionals feel inadequately trained to engage in effective sexual health promotion and to provide enhanced sexual health services. Personal embarrassment and lack of time were also identified as barriers for providing effective sexual health care. From the patient's perspective, their expectations of encounters with health and social care staff need to be considered. Ogden and Jain (2005) identify the focus on the patient's agenda as one of the expected features of a primary care consultation, so that introducing issues outside of the agenda for the encounter may result in threats to trust. The issue of trust in health care is an important one and several authors have recognised that trust is conditioned by experience and expectations (Gilson, 2006; van den Brink-Muinen and Rijken, 2006; Calnan, and Rowe, 2008). There is little literature on interaction with support staff although studies of interaction with receptionists in primary care suggest that they are regarded as a barrier to access by patients (Arber and Sawyer, 1985; Offredy, 2002) and are unlikely therefore to be a trusted source of health advice. Similar arguments could be made for other public servants, for whom public expectations are bounded and do not include health advice giving.

Dolan et al (2010) from a behavioural economics perspective advocate ensuring that the right "messenger" delivers brief interventions. This will often be someone held as an expert in their field, such as a health professional, but equally might be someone seen as sharing characteristics with the citizen, such as origins and background. It is an important consideration in developing policy as success in opportunistic interventions may rely on the messenger. If considered inappropriate by the patient, whether overall or at a particular time when the intervention is attempted this may lessen the impact or act as a disincentive to following advice.

In research aimed at estimating the cost effectiveness of health promotion interventions, brief interventions have been shown to be cost-effective in the case of smoking (Parrott et al., 2006) and in alcohol (Wutzke et al., 2001; Babor et al., 2006). In the Babor et al. (2006) study, delivery of the intervention by physician's assistants and nurse practitioners was found as effective and cheaper than delivery by physicians. Physical activity interventions such as walking and cycling often have

very low cost, for high benefits and are likely to be extremely cost effective, in a German study of physical activity interventions (Müller-Riemenschneider et al., 2009), brief interventions in primary care and telephone interventions were both found to be cost effective in increasing physical activity. However none of these studies includes longer term follow up, found to be a weakness by Lawlor et al. (2001).

The absence of reviews of evidence on the participation of other professions in local public services in brief health promotion interventions is significant as the proposed policy specifically targets professions where non-health related contacts are common. The aims of social care, in terms of protection of vulnerable people and prevention of harm are a reasonable match to those of health promotion (Rose, and Jones, 2001), however inter-professional work is hampered by differing cultures, values and knowledges (Hall, 2005). Nonetheless, policy directions since the 1990s have emphasised the interconnection of services and the role for social care in prevention. Initiatives like Sure Start (Glass, 1999) and Communities First (Welsh Government, 2012) have been aimed at encouraging interagency partnerships with local communities, with positive benefits for quality of life. These approaches offer opportunities both for cross-profession training and for low key interventions in the form of generalised health advice from across professional disciplines. They also but rely on the development of the kind of trusting relationships which may be analogous to those existing within primary care (Rose, and Jones, 2001).

Although no research was found on the potential for effective involvement of non-professional staff in brief health promotion interventions, there is a long tradition of involvement of volunteers, peer educators and community workers in health activities with mixed results (Harden et al., 2001; Merzel and D’Afflitti, 2003; Stock et al., 2007). The Harden et al (2001) systematic review (which was not limited to brief interventions) found mixed evidence in studies of peer-led health promotion among young people, while Peel and Warburton (2009) were similarly equivocal with respect to older people.

If a wide range of public service professionals and other workers are to participate in brief health interventions, there is an immediate need for training for professionals and other staff as well as an on-going need for dissemination of new research as it is published and clarification in areas of uncertainty. There is also a need for comprehensive research and evaluation studies to accompany policy in this direction.

Bernstein and colleagues (2010) make the point that brief interventions need to be gateways into health promotion service which offer more intensive or comprehensive support for behavioural change, while the importance of understanding the process of behaviour change is brought home by a qualitative study of health behaviour discussions in primary care (Flocke et al., 2009). The author found that patients who expressed a desire to change were more likely to receive advice. Health promotion theories, such as the transtheoretical (stages of change) model (Prochaska and DiClemente, 1983) emphasise that the process of change is progressive, while social learning theory considers the individual’s behaviour to both influence and be influenced by the environment and their own characteristics (Blair, 1993). The environmental and social determinants of health are known to be central to addressing health improvement across the social classes and approaches that focus on behaviour change in the absence of efforts to recognise the differences between social groups are likely to be unsuccessful. Success in advice requires knowledge of individual

circumstance and recognising the right moment to give the impetus to change. Intervention at the wrong stage of change is unlikely to be sustainable, however a brief intervention at the right time might be a gateway event for significant change.

Conclusions

Brief intervention strategies, especially those in primary care appear to be effective and cost effective in certain circumstance although there are questions about their application across other public health priorities and about their long term impacts. Such approaches are regarded as good practice in primary care and, even though some professionals may not have confidence in their knowledge in some instances, should be encouraged. These interventions should be seen as gateways to more intensive interventions or lead to follow up activity.

While there is good evidence of success in health improvement from some health professionals, the evidence that brief interventions by groups other than primary care professionals is sparse.

Initiating a programme of opportunistic health advice from across the public sector is unlikely to have a dramatic impact on population health. The absence of health promotion training among social care professionals and the professions allied to medicine and the lack of confidence shown even by GPs in undertaking brief interventions means that public services are poorly prepared to successfully implement 'Every Contact Counts' at present.

Investment in inter-professional training and curriculum development for a wide range of professions who might be enabled to participate in such a programme is necessary as a prerequisite. That training should include developing a knowledge base of the approaches used by health promoters as well as the basic health information knowledge. Allied to such a development, an increase in the health literacy of people in Wales, through programmes in schools and colleges which are already successful in Wales is necessary.

Recommendations

- Evidence supports the provision of brief interventions by primary care staff in smoking and alcohol misuse prevention. There is also reasonable evidence that brief interventions can be helpful in leading to increases in physical activity, however in all cases, brief interventions should be seen as gateway activities leading to more intensive health promotion activity.
- There is little evidence that professionals outside primary care have training or the knowledge to undertake effective brief interventions, while research suggests that no single professional group is adequately trained in the delivery of brief interventions. It is imperative that training in techniques such as motivational interviewing and behaviour change is available widely to health and allied professionals and others who may be expected to deliver brief interventions.

References

- Aalto, M., Pekuri, P., Seppä, K., 2001. Primary health care nurses' and physicians' attitudes, knowledge and beliefs regarding brief intervention for heavy drinkers. *Addiction* 96, 305–311.
- Anderson, C., Rajyaguru, R., 2002. The role of community pharmacists and medicines counter assistants in health promotion: reflections from a folic acid campaign. *International Journal of Pharmacy Practice* 10, 17–22.
- Arber, S., Sawyer, L., 1985. The role of the receptionist in general practice: a “dragon behind the desk”? *Soc Sci Med* 20, 911–921.
- Aveyard, P., Begh, R., Parsons, A., West, R., 2011. Brief opportunistic smoking cessation interventions: a systematic review and meta-analysis to compare advice to quit and offer of assistance. *Addiction (Abingdon, England)*.
- Berkman, N.D., Sheridan, S.L., Donahue, K.E., Halpern, D.J., Viera, A., Crotty, K., Holland, A., Brasure, M., Lohr, K.N., Harden, E., others, 2011. Health literacy interventions and outcomes: An updated systematic review. Agency for Healthcare Research and Quality.
- Bernstein, H., Cosford, P., Williams, A., 2010. Enabling Effective Delivery of Health and Wellbeing: An Independent Report. Department of Health, London.
- Bertholet, N., Daeppen, J.-B., Wietlisbach, V., Fleming, M., Burnand, B., 2005. Reduction of Alcohol Consumption by Brief Alcohol Intervention in Primary Care: Systematic Review and Meta-analysis. *Arch Intern Med* 165, 986–995.
- Blair, J.E., 1993. Social learning theory: strategies for health promotion. *AAOHN J* 41, 245–249.
- van den Brink-Muinen, A., Rijken, P., 2006. Does trust in health care influence the use of complementary and alternative medicine by chronically ill people? *BMC Public Health* 6, 188.
- Butler, C.C., Pill, R., Stott, N.C.H., 1998. Qualitative study of patients' perceptions of doctors' advice to quit smoking: implications for opportunistic health promotion. *BMJ* 316, 1878–1881.
- Cabinet Office, 2010.
http://www.instituteforgovernment.org.uk/pdfs/Building_the_big_society_lord_wei.pdf (accessed 27 Feb 2012)
- Calnan, M., Rowe, R., 2008. Trust relations in a changing health service. *Journal of Health Services Research and Policy* 13, 97–103.
- Carroll, J.K., Fiscella, K., Epstein, R.M., Jean-Pierre, P., Figueroa-Moseley, C., Williams, G.C., Mustian, K.M., Morrow, G.R., 2008. Getting patients to exercise more: a systematic review of underserved populations. *J Fam Pract* 57, 170–176, E1–3, 1 p following E3.
- Casey, D., 2007. Nurses' perceptions, understanding and experiences of health promotion. *Journal of Clinical nursing* 16, 1039–1049.
- D'Onofrio, G., Degutis, L.C., 2002. Preventive care in the emergency department: screening and brief intervention for alcohol problems in the emergency department: a systematic review. *Acad Emerg Med* 9, 627–638.
- Dhital, R., Whittlesea, C.M., Norman, I.J., Milligan, P., 2010. Community pharmacy service users' views and perceptions of alcohol screening and brief intervention. *Drug and Alcohol Review* 29, 596–602.
- Dolan, P., Hallsworth, M., Halpern, D., King, D., Vlaev, I., 2010. MINDSPACE: Influencing behaviour through public policy. Cabinet Office/Institute for Government, London.
- Dunn, C., Deroo, L., Rivara, F.P., 2001. The use of brief interventions adapted from motivational interviewing across behavioral domains: A systematic review. *Addiction* 96, 1725–1742.
- Fernandez, R., Griffiths, R., Everett, B., Davidson, P., Salamonson, Y., Andrew, S., 2007. Effectiveness of brief structured interventions on risk factor modification for patients with coronary heart disease: a systematic review. *International Journal of Evidence-Based Healthcare* 5, 370–405.

- Fleming, M.F., Balousek, S.L., Grossberg, P.M., Mundt, M.P., Brown, D., Wiegel, J.R., Zakletskaia, L.I., Saewyc, E.M., 2010. Brief physician advice for heavy drinking college students: a randomized controlled trial in college health clinics. *J Stud Alcohol Drugs* 71, 23–31.
- Foster, G., Taylor, S.J., Eldridge, S., Ramsay, J., Griffiths, C.J., n.d. Self-management education programmes by lay leaders for people with chronic conditions.
- Getz, L., Sigurdsson, J.A., Hetlevik, I., 2003. Is opportunistic disease prevention in the consultation ethically justifiable? *Bmj* 327, 498–500.
- Gill, J.S., O'May, F.P., 2011. Is It My Job? Alcohol Brief Interventions: Knowledge and Attitudes among Future Health-care Professionals in Scotland. *Alcohol and Alcoholism* 46, 441–450.
- Gilson, L., 2006. Trust in health care: theoretical perspectives and research needs. *J Health Organ Manag* 20, 359–375.
- Glass, N., 1999. Sure Start: the development of an early intervention programme for young children in the United Kingdom. *Children & Society* 13, 257–264.
- Hall, P., 2005. Interprofessional teamwork: Professional cultures as barriers. *Journal of Interprofessional Care* 19, 188–196.
- Harden, A., Oakley, A., Oliver, S., 2001. Peer-delivered health promotion for young people: A systematic review of different study designs. *Health Education Journal* 60, 339–353.
- Hull, M., 2007. Opportunistic/Preventive Care and Health Promotion, in: *Learning to Consult*, Chapman, Rodger (ed). Radcliffe, Oxford, pp. 95–106.
- Jochum, V., Pratten, B., Wilding, K., 2005. Civil renewal and active citizenship: A guide to the debate. NCVO.
- Kaner, E.F.S., Brown, N., Jackson, K., 2011. A systematic review of the impact of brief interventions on substance use and co-morbid physical and mental health conditions. *Mental Health and Substance Use* 4, 38–61.
- Kaner, E.F.S., Dickinson, H.O., Beyer, F.R., Campbell, F., Schlesinger, C., Heather, N., Saunders, J.B., Burnand, B., Pienaar, E.D., 2007. Effectiveness of brief alcohol interventions in primary care populations.
- Lawlor, D., Hanratty, B., 2001. The effect of physical activity advice given in routine primary care consultations: a systematic review. *Journal of Public Health* 23, 219.
- McQueen, J., Howe, T.E., Allan, L., Mains, D., 2010. Brief interventions for heavy alcohol users admitted to general hospital wards.
- Merzel, C., D'Afflitti, J., 2003. Reconsidering Community-Based Health Promotion: Promise, Performance, and Potential. *Am J Public Health* 93, 557–574.
- Moyer, A., Finney, J.W., Swearingen, C.E., Vergun, P., 2002. Brief interventions for alcohol problems: a meta-analytic review of controlled investigations in treatment-seeking and non-treatment-seeking populations. *Addiction* 97, 279–292.
- Müller-Riemenschneider, F., Reinhold, T., Willich, S.N., 2009. Cost-effectiveness of interventions promoting physical activity. *Br J Sports Med* 43, 70–76.
- NHS local, 2011. <http://nhslocal.nhs.uk/node/4004> – dated July 4, 2011 (accessed 27 Feb 2012)
- NICE, 2006. Brief interventions and referral for smoking cessation [WWW Document]. NICE. URL <http://www.nice.org.uk/>
- Nicholson, S.O., 2000. The effect of cardiovascular health promotion on health behaviors in elementary school children: an integrative review. *J Pediatr Nurs* 15, 343–355.
- Nilsen, P., Baird, J., Mello, M.J., Nirenburg, T., Woolard, R., Bendtsen, P., Longabaugh, R., 2008. A systematic review of emergency care brief alcohol interventions for injury patients. *Journal of Substance Abuse Treatment* 35, 184–201.
- Nolan, P., Sourtzi, P., Andrews, R., 1996. Evaluation of health promotion activities in community nursing practice. *Journal of Advanced Nursing* 24, 1214–1223.
- Offredy, M., 2002. Access to primary care: decision making by GP receptionists. *Br J Community Nurs* 7, 480–485.

- Ogden, J., Jain, A., 2005. Patients' experiences and expectations of general practice: a questionnaire study of differences by ethnic group. *Br J Gen Pract* 55, 351–356.
- Peel, N.M., Warburton, J., 2009. Using senior volunteers as peer educators: What is the evidence of effectiveness in falls prevention? *Australasian Journal on Ageing* 28, 7–11.
- Pennant, M., Davenport, C., Bayliss, S., Greenheld, W., Marshall, T., Hyde, C., 2010. Community Programs for the Prevention of Cardiovascular Disease: A Systematic Review. *American Journal of Epidemiology* 172, 501–516.
- Popay, J., Williams, G., Thomas, C., Gatrell, A., 1998. Theorising inequalities in health : the place of lay knowledge. *Sociology of Health Illness* 20, 619–644.
- Prochaska, J., DiClemente, C., 1983. Stages and Processes of Self-Change of Smoking: Toward An Integrative Model of Change. *Journal of Consulting and Clinical Psychology* 51, 390–395.
- Proude, E.M., D'Este, C., Ward, J.E., 2004. Randomized trial in family practice of a brief intervention to reduce STI risk in young adults. *Family practice* 21, 537.
- Ramsay, J., Carter, Y., Davidson, L., Dunne, D., Eldridge, S., Feder, G., Hegarty, K., Rivas, C., Taft, A., Warburton, A., 2009. Advocacy interventions to reduce or eliminate violence and promote the physical and psychosocial well-being of women who experience intimate partner abuse. *Cochrane Database Syst Rev* CD005043.
- Rhodes, S.D., Foley, K.L., Zometa, C.S., Bloom, F.R., 2007. Lay health advisor interventions among Hispanics/Latinos: a qualitative systematic review. *Am J Prev Med* 33, 418–427.
- Rose, W., Jones, L., 2001. Social Services and health promotion: towards independence and empowerment., in: *Health Promotion: Professional Perspectives.*, Scriven, Angela & Orme, Judy (eds). Palgrave Macmillan, Basingstoke:, pp. pp. 95–104.
- Scher, L., Maynard, R.A., Stagner, M., 2006. Interventions intended to reduce pregnancy-related outcomes among adolescents.
- Scottish Health Action on Alcohol Problems, 2008. Screening and brief interventions for risky and harmful drinking. Edinburgh.
- Sheridan, J., Wheeler, A., Ju-Hsing Chen, L., Chen-Yun Huang, A., Nga-Yee Leung, I., Yow-Chyi Tien, K., 2008. Screening and brief interventions for alcohol: attitudes, knowledge and experience of community pharmacists in Auckland, New Zealand. *Drug and Alcohol Review* 27, 380–387.
- South, J., Meah, A., Bagnall, A.-M., Kinsella, K., Branney, P., White, J., Gamsu, M., 2010. People in Public Health - a study of approaches to develop and support people in public health roles (No. SDO project (08/1716/206)), National Institute for Health Research Service Delivery and Organisation Programme. HMSO, London.
- Spanou, C., Simpson, S., Hood, K., Edwards, A., Cohen, D., Rollnick, S., Carter, B., McCambridge, J., Moore, L., Randell, E., others, 2010. Preventing disease through opportunistic, rapid engagement by primary care teams using behaviour change counselling (PRE-EMPT): protocol for a general practice-based cluster randomised trial. *BMC family practice* 11, 69.
- Stock, S., Miranda, C., Evans, S., Plessis, S., Ridley, J., Yeh, S., Chanoine, J.-P., 2007. Healthy Buddies: A Novel, Peer-Led Health Promotion Program for the Prevention of Obesity and Eating Disorders in Children in Elementary School. *Pediatrics* 120, e1059–e1068.
- Sullivan, L.E., Tetrault, J.M., Braithwaite, R., Turner, B., Fiellin, D., 2011. A meta-analysis of the efficacy of nonphysician brief interventions for unhealthy alcohol use: implications for the patient-centered medical home. *American Journal on Addictions* 20, 343–356.
- Summerskill, W.S.M., Pope, C., 2002. "I saw the panic rise in her eyes, and evidence-based medicine went out of the door." An exploratory qualitative study of the barriers to secondary prevention in the management of coronary heart disease. *Family practice* 19, 605.
- Swider, S.M., 2002. Outcome effectiveness of community health workers: an integrative literature review. *Public Health Nursing* 19, 11–20.
- Thomas, H., Fitzpatrick-Lewis, D., 2007. The effectiveness of interventions to increase physical activity among marginalized populations. Effective Public Health Practice Project, Hamilton, ON.

- Thompson, K., Casson, K., Fleming, P., Dobbs, F., Parahoo, K., Armstrong, J., 2008. Sexual Health Promotion in Primary Care – Activities and Views of General Practitioners and Practice Nurses. *Primary Health Care Research & Development* 9, 319–330.
- Vasilaki, E.I., Hosier, S.G., Cox, W.M., 2006. The Efficacy of Motivational Interviewing as a Brief Intervention for Excessive Drinking: A Meta-Analytic Review. *Alcohol and Alcoholism* 41, 328–335.
- Verhaeghe, N., De Maeseneer, J., Maes, L., Van Heeringen, C., Annemans, L., 2011. Perceptions of mental health nurses and patients about health promotion in mental health care: a literature review. *Journal of Psychiatric and Mental Health Nursing* 18, 487–492.
- Vickridge, R., Ayub, R., 2003. Participation and empowerment in community care, in: *The Social Significance of Health Promotion*. MacDonald, Théodore Harney (ed). Psychology Press, Hove, pp. Chapter 4, 43–54.
- Visram, S., Clarke, C., White, M., 2010. P60 “It’s like the service that was never there”: a qualitative longitudinal study of lay health trainer services in the North East of England. *Journal of Epidemiology & Community Health* 64, A57–A57.
- Wachtel, T., Staniford, M., 2010. The effectiveness of brief interventions in the clinical setting in reducing alcohol misuse and binge drinking in adolescents: a critical review of the literature. *Journal of Clinical Nursing* 19, 605–620.
- Ward, L., Banks, L., 2010. Evaluation of health trainers in West Sussex (Research Briefings). University of Brighton, Brighton.
- Watson, H., Munro, A., Wilson, M., Kerr, S., Godwin, J., 2010. Involvement of nurses and midwives in screening and brief interventions for hazardous and harmful use of alcohol and other psychoactive substances. WHO Press, Geneva.
- Welsh Government, 2012. Communities First [WWW Document]. URL <http://wales.gov.uk/topics/housingandcommunity/regeneration/communitiesfirst/?lang=en>
- World Health Organisation, 1986. The Ottawa Charter for Health Promotion.
- World Health Organisation, 1998. The Health Promotion Glossary.
- Wutzke, S.E., Conigrave, K.M., Saunders, J.B., Hall, W.D., 2002. The long-term effectiveness of brief interventions for unsafe alcohol consumption: a 10-year follow-up. *Addiction* 97, 665–675.
- Zanis, D.A., Hollm, R.E., Derr, D., Ibrahim, J.K., Collins, B.N., Coviello, D., Melochick, J.R., 2011. Comparing intervention strategies among rural, low SES, young adult tobacco users. *Am J Health Behav* 35, 240–247.
- Zwar, N., Richmond, R., Borland, R., Peters, M., Litt, J., Bell, J., Caldwell, B., Ferretter, I., 2011. Supporting smoking cessation: a guide for health professionals, 2011.