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Clinician assessment, advice and referral for multiple health risk behaviors: Prevalence and predictors of delivery by primary health care nurses and allied health professionals

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ABSTRACT

Objective: Primary care clinicians have considerable potential to provide preventive care. This study describes their preventive care delivery.
Methods: A survey of 384 community health nurses and allied health clinicians from in New South Wales, Australia was undertaken (2010–11) to examine the assessment of client risk, provision of brief advice and referral/follow-up regarding smoking inadequate fruit and vegetable consumption, alcohol misuse, and physical inactivity; the existence of preventive care support strategies; and the association between supports and preventive care provision.
Results: Preventive care to 80% or more clients was least often provided for referral/follow-up (24.7–45.6% of clinicians for individual risks, and 24.2% for all risks) and most often for assessment (34.4–69.3% of clinicians for individual risks, and 24.4% for all risks). Approximately 75% reported having 9 or fewer of 17 supports. Provision of care was associated with: availability of a paper screening tool; training; GP referral letter; and number of supports.
Conclusion: The delivery of preventive care was limited, and varied according to type of care and risk. Supports were variably associated with elements of preventive care.
Practice implications: Further research is required to increase routine preventive care delivery and the availability of supports.

1. Introduction

In developed countries, tobacco smoking, poor nutrition, risky alcohol use and physical inactivity constitute the primary behavioral risks for the most common causes of mortality and morbidity [1–3]. In such countries, the majority of adults have at least one chronic disease risk [4–6], and a substantial proportion have three or more [4,6,7]. Routine, opportunistic delivery of preventive care by primary health care service providers to all clients is recommended to reduce this disease burden [8–11] with systematic review evidence supporting the efficacy of such care [12–16]. It has been recommended that such care be provided for multiple risks [8–10], and given the competing priorities and brevity of a clinical consultation, that its essential elements include: risk assessment, brief advice and referral/follow-up [10,11,17].

Primary health care clinicians are potentially key providers of preventive care [18–31] as they have a focus on chronic disease prevention [20,22] and deliver care on multiple occasions to population groups with a high prevalence of behavioral health risks [20–22,32]. The multi-disciplinary nature of the primary care

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workforce in many countries offers further potential for the delivery of preventive care [26,33–37]. This workforce can include a variety of health care professionals such as nurses, physiotherapists, dieticians, occupational therapists, and other allied health professionals [26,22,36–38].

Despite the potential of primary health care services to provide preventive care, studies of the prevalence of its delivery have reported less than optimal levels of delivery for a range of risk factors [39–42]. Similarly, research regarding the prevalence of such care provided by primary care nurses and allied health clinicians suggests variable and often sub-optimal levels of care delivery [32,37,43–60], particularly regarding referral or follow-up [49,53,55], with care delivery varying by type of preventive care, health risk behavior [32,37,44–49,53,55,56,58–61], service type and other service characteristics including location and consultation type [32,55,61–63], client's presenting condition [32] and health care provider characteristics such as education level/knowledge, length of employment and age [49,62]. However, existing studies have focused primarily on the delivery of preventive care for single behavioral risks (predominantly smoking) [43–46,48,49,51–55,57,59], and on single elements of preventive care, predominantly risk assessment [32,45,46,48,49,53,55,57–60] and/or brief advice [37,43,45–56,58–60], with no single study describing the prevalence of each of the recommended multiple elements of preventive care for the four behavioral risks (smoking, poor nutrition, risky alcohol use and physical inactivity) individually or combined. The prevalence of care provision by primary care nurses and other allied health clinicians for each of the recommended elements of preventive care for multiple health risk behaviors is unknown.

Systematic reviews and intervention trial evidence have reported that the availability of practice support strategies (strategies that support best practice care delivery) in the clinical practice setting is important for the uptake of recommended forms of clinical practice by health providers generally [64] and for the provision of preventive care by primary health care providers specifically [34,45,48,59,65–67]. Strategies suggested by such studies to be effective in facilitating practice change include: printed educational materials, educational meetings, local opinion leaders, audit and feedback, and reminders [64]. Intervention research involving nurses and other allied health clinicians within the primary care setting also suggests that multi-strategic interventions using combinations of such strategies can improve preventive care [48,59,66–68]. However, all studies were related to the provision of preventive care for a single behavioral risk, mostly smoking [45,48,66–68].

No studies have reported the prevalence of practice support strategies other than training for nurses and allied health clinicians in the primary healthcare setting [43,46,50,53–55,63]. These studies suggest the availability of such training is limited (range: 4–60%) [43,46,50,53–55,63]. Furthermore, no studies examined the association between the availability of multiple practice support strategies and the provision of multiple elements of preventive care for all four behavioral risks.

Given the limitations of past research regarding the delivery of preventive care by primary care nurses and other allied health clinicians, a study was undertaken to assess: (a) the prevalence of recommended elements of preventive care (assessment, brief advice, and referral/follow-up) provided by primary care nurses and other allied health clinicians to address smoking, inadequate fruit and vegetable consumption, risky alcohol use, physical inactivity, and all four risks combined; (b) the prevalence of practice support strategies for the delivery of such care; and (c) the association between the availability of practice supports and the delivery of such preventive care.

2. Methods

2.1. Design and setting

A cross sectional survey of primary health care nursing and allied health clinicians across a network of public community health facilities in one health district of New South Wales (NSW), Australia was undertaken between May 2010 and January 2011. In Australia, public community health services [35], are the second largest provider of health care to the general population after general practitioners [20,69]. The district includes 56 community health facilities and serves a population of approximately 840,000 people in metropolitan, regional, rural and remote locations. Nurses encompassed registered nurses and other nurses; allied health clinicians encompassed: psychologists/psychiatrists/counselors, social workers, occupational therapists, physiotherapists, dieticians/nutritionists, among others.

Public community health services in NSW have a focus on improving and maintaining health and wellbeing of individuals, families and local communities [20]. All facilities were subject to a district wide policy regarding the delivery of preventive care that required: the routine assessment of all clients regarding their status for four behavioral health risks (smoking, inadequate fruit and vegetable consumption, risky alcohol use, and physical inactivity); and the provision of brief advice and referral/follow up for clients identified as being at risk.

The data were obtained as the baseline survey of an intervention trial [70], and approved by the Hunter New England Area (approval No. 09/06/17/4.03) and the University of Newcastle Human Research Ethics Committees (approval No. H-2010-1116).

2.2. Participants and recruitment

All 56 community health facilities in the district were eligible to participate. The facilities were staffed by nurses and allied health clinicians. Clinicians were employed at the following services: community nursing, allied health, community child and family health, diabetes services, and aged care services (approximately 1300). Clinicians were eligible if they: had at least 10 appointments with adult clients (>18 years) within the last 2 months; had been employed for at least 3 months; and were not contractors. Services ineligible for inclusion were: sexual assault, palliative care, aged care assessment, dementia, genetics, and child protection services. Such services were deemed ineligible based upon the advice from the clinical services.

2.3. Data collection procedures

An email from the District Director of Primary and Community Health was sent to all facility managers asking them to encourage clinician participation in the survey. A sample of approximately 40% of clinicians was randomly selected from an electronic community health staff database. The selected clinicians were posted an information letter, contacted by phone to confirm eligibility, and asked to participate in a computer-assisted telephone interview during work hours. The 20 min survey was pilot tested with clinicians and conducted by trained interviewers.

Selection of 40% of staff was expected to yield a sample of around 400 clinicians (based on selection of 500 and an 80% participation rate). This sample size would allow an estimate of prevalence of care with a precision of approximately ±2.5% (assuming worst case of 50% prevalence).