Chelonian Conservation And Biology



Vol. 17No.2 (2022) | <u>https://www.acgpublishing.com/</u> | ISSN - 1071-8443 DOI:doi.org/10.18011/2022.04(1) 1728.1737

THE IMPACT OF NURSE-LED HEALTH PROMOTION AND DISEASE PREVENTION INITIATIVES

Abdullah Maashi Alenezi, Hana Samir Alruwaili, Huda Saud M Aldhfeeri, Mofeedah Nafe Alrawali, Fadyah Nafea Alrowaili, Mureefah Musabah Alsharariy, Maram Aldawi Alruwaili, Hamidah Rajan Aldhafeeri, Afrah Muzil Aldhafeeri, Anwar Sabah Alshammari, Saad Abdullah Alsultan, Huda Abdullah Alhazeem, Amjad Khaled Budookhi, Aysha Faisal Roesain Alnazi

Abstract

Increasing global research indicates that treatments administered by primary care nurses may help in altering lifestyle risk factors and monitoring chronic illness. So far, there has been a lack of investigation into the possibility and approval of such treatments. The objective is to investigate the viability and reception of nurse-led treatments for managing chronic diseases and reducing lifestyle risk factors in primary care settings, such as general practice or family practice. A comprehensive search was performed in the CINAHL, Medline, and Web of Science databases to locate pertinent material. The methodological quality of the papers was evaluated and data was extracted prior to doing theme analysis. The analysis revealed four main themes: (1) factors that support interventions; (2) obstacles to interventions; (3) satisfaction of consumers; and (4) the role of primary care nurses. Existing literature provides evidence that nurse-led treatments in primary care are both feasible and acceptable for modifying lifestyle risk factors. The long-term viability of these initiatives mostly depends on organizational variables, including money, educational paths, and professional support for the primary care nursing position. Additional rigorous research on treatments by primary care nurses is necessary to enhance the existing body of data.

1. Introduction

The rising incidence of chronic illnesses poses a substantial obstacle to primary healthcare systems on a global scale. The transition from acute to chronic illness is being complicated by changing lifestyles, ageing populations, retirement of health workforce, and a decrease in the number of general practitioners (GP). These factors contribute to the complexity of global trends in healthcare (Australian Institute of Health and Welfare 2015, Hegney, Patterson, Eley, Mahomed, & Young, 2013). Primary care physicians are placing more emphasis on preventative



All the articles published by Chelonian Conservation and Biology are licensed under a Creative Commons Attribution-NonCommercial4.0 International License Based on a work at https://www.acgpublishing.com/

CrossMark

and optimum treatment techniques in order to enhance health outcomes for individuals with chronic illness (Wilcox, 2014).

The nursing staff in primary care has seen substantial growth in order to address the increasing need for chronic illness treatment and lifestyle risk factor reduction (Australian Medicare Local Alliance 2012; Phillips & Hall, 2013). These nurses possess the capacity to not only expand the variety of services provided in primary care but also aid in handling the growing need for community-based care (Halcomb, Davidson, Daly, Yallop, & Tofler, 2004). The growth of primary care nurses has seen significant transformations in their role, shifting from being largely a receptionist or assistant (Condon, Willis, & Litt, 2000) to being a crucial healthcare worker within the primary care team (Australian College of Nursing 2015). Although primary care nurses have had professional progress, their full potential and contribution have not been fully exploited (Halcomb, Salamonson, Davidson, Kaur, & Young, 2014; McInnes, Peters, Bonney, & Halcomb, 2015; Merrick, Fry, & Duffield, 2014).

2. Health effects of interventions conducted by nurses

Various international studies have examined the health effects of interventions conducted by nurses, with the goal of mitigating the influence of behavioral risk factors and the advancement of chronic illnesses. Halcomb, Moujalli, Griffiths, and Davidson (2007) conducted a comprehensive analysis of interventions led by primary care nurses to address cardiovascular disease (CVD) risk. They found that these interventions led to positive changes in blood pressure, cholesterol levels, diet, and physical activity. Furthermore, many lifestyle risk factors such as smoking cessation, weight management, diabetes, and alcohol minimization have been associated with favorable health outcomes, as documented by Zwar et al. (2015), Sargent, Forrest, & Parker (2012), Furler et al. (2014), and Clossick & Woodward (2014) respectively.

Although there is increasing data supporting the positive impact of these treatments on health outcomes, there is a lack of comprehensive analysis of their acceptability and feasibility among both healthcare professionals and the recipients of these therapies. The assessment approach lacks a comprehensive understanding of the significance of consumer satisfaction with a nurse-led style of care (Desborough, Phillips, Banfield, Bagheri, & Mills, 2015; Mahomed, St John, & Patterson, 2012). Consumers who have favorable health experiences are more inclined to actively participate in services, comply with treatment, and implement recommendations given by health professionals (Halcomb, Davies, & Salamonson, 2015; Sofaer & Firminger, 2005). Considering this, lifestyle interventions that seek to enhance health outcomes should be carefully tailored and implemented to align with the specific preferences and requirements of the intended people (Vogus & McClelland, 2016). Currently, there has been less investigation on the practicality and willingness of implementing primary care nurse interventions aimed at decreasing lifestyle risk. In order for nurse-led initiatives to have a substantial presence in primary care, they must elicit trust and approval from both consumers and health professionals.

Hence, it is opportune to examine the viability and acceptability of nurse-led programs for managing chronic diseases and reducing lifestyle risk factors in primary care.

3. Implementers of interventions

Significant facilitators in the interventions were found as pre-intervention education, continuous support, and collaborative practice. Regarding intervention preparation, several studies emphasized the importance of nursing training as a crucial basis for delivering successful interventions (Beighton et al., 2015; Halcomb, Furler, et al., 2015; McLeod et al., 2005; McQuigg et al., 2008; Verwey et al., 2012; Zwar et al., 2011). The smoking cessation studies conducted by Halcomb, Furler, et al. (2015) and Zwar et al. (2011) shown that the education offered improved the knowledge and confidence of primary care nurses. Nevertheless, both studies also indicated that primary care nurses expressed a need for more comprehensive and continuous training.

Multiple studies used mentoring assistance to provide guidance to primary care nurses beyond the training and implementation phases of the intervention (Halcomb, Furler, et al., 2015; Lock et al., 2006; McLeod et al., 2005; McQuigg et al., 2008; Zwar et al., 2011). Primary care nurses often reported that telephone mentoring help provided by the study team was seen as supportive and effective in increasing confidence (Halcomb, Furler, et al., 2015; McLeod et al., 2005; McQuigg et al., 2008). Several studies demonstrated the use of reflexive research, where input from primary care nurses was used to enhance and modify the intervention process and protocols throughout the study (Beighton et al., 2015; McQuigg et al., 2008; Verwey et al., 2012).

The study by Hegney et al. (2013), Mahomed et al. (2012), and McQuigg et al. (2008) discovered that collaboration between general practitioners (GPs) and primary care nurses improves the implementation of interventions. Studies have shown that interventions that incorporate active participation and support from general practitioners and follow the nurse-led model are related with high levels of consumer satisfaction and confidence (Hegney et al., 2013; Mahomed et al., 2012). Similarly, McQuigg et al. (2008) found that practices that adopted a collegial approach to the intervention had favorable experiences with research participation from both staff and customers.

4. Obstacles to implementing interventions

The initiative faced many often mentioned obstacles, including insufficient training of primary care nurses, lack of assistance, heavy workload, and limited money (Beighton et al., 2015; Halcomb, Furler, et al., 2015; Hanley et al., 2013; Hegney et al., 2013; Verwey et al., 2012; Zwar et al., 2011). Differences were seen in the extent of prior education and continuous assistance given to nurses. The concise training session, lasting 30 to 40 minutes, provided by Lock et al. (2006), had the objective of equipping primary care nurses with the necessary skills to administer an alcohol intervention. However, a significant number of nurses expressed

difficulties about the research protocol and chose to withdraw from the intervention before its conclusion. Likewise, primary care nurses who indicated a sense of being ill-equipped or insufficiently consulted throughout the implementation phase reported challenges in carrying out the intervention (Beighton et al., 2015; McLeod et al., 2005; McQuigg et al., 2008; Zwar et al., 2011). McQuigg et al. (2008) found that these uncertainties posed a danger of causing primary care nurses to get disengaged with the research process. Several studies (Halcomb, Furler, et al., 2015; McLeod et al., 2005; Zwar et al., 2011) offered continuous telephone assistance to primary care nurses in order to increase their confidence and help them navigate difficult situations. Nevertheless, the adoption of these services was apparently low and mostly instigated by the study team.

One of the main obstacles found in the studies included was the difficulty of incorporating interventions into current nursing practices in primary care (Beighton et al., 2015; Halcomb, Furler, et al., 2015; Hegney et al., 2013; Verwey et al., 2012; Zwar et al., 2011). Certain primary care nurses had difficulties in allocating sufficient time to provide the treatments due to their already demanding workload. Furthermore, several studies have found a direct link between time constraints and funding. These studies have raised concerns about the sustainability of interventions because there is not enough funding to compensate primary care nurses for their work (Beighton et al., 2015; Halcomb, Furler, et al., 2015; Hanley et al., 2013; Lock et al., 2006; Verwey et al., 2012).

5. Consumer satisfaction

The acceptability of nurse-led interventions to primary care consumers has been validated by several research (Beighton et al., 2015; Halcomb, Furler, et al., 2015; Hanley et al., 2013, 2015; Hegney et al., 2013; Mahomed et al., 2012; McLeod et al., 2005; McQuigg et al., 2008; Zwar et al., 2011). The consumer satisfaction was widely documented in relation to the primary care nurses' capacity to establish therapeutic relationships, administer personalized care, and offer motivational support (Beighton et al., 2015; Halcomb, Furler, et al., 2015; Hanley et al., 2013; Hegney et al., 2013; Mahomed et al., 2012). Consumers found primary care nurses to have a communication style that was accessible and open, as shown in studies by Halcomb, Furler, et al. (2015), Hegney et al. (2013), Mahomed et al. (2012), McQuigg et al. (2008), and Zwar et al. (2011). Both McLeod et al. (2005) and Beighton et al. (2015) emphasized the practice of primary care nurses customizing therapies to suit the unique requirements of each client. Multiple research have also recognized the significant contribution of primary care nurses in assisting and overseeing the advancement of consumers towards their health objectives (Beighton et al., 2015; Hanley et al., 2013; Verwey et al., 2012). Increased frequency of primary care nurse follow-up further enhanced consumer satisfaction with treatment and desire to maintain health objectives (Mahomed et al., 2012; Zwar et al., 2011).

Although primary care nurses are supported by professionals, there is still some misunderstanding among consumers about their job. Some consumers have reported uncertainty about what primary care nurses are capable of doing (Hanley et al., 2013; Mahomed et al., 2012; McQuigg et al., 2008). Mahomed et al. (2012) discovered that consumers usually expressed confidence in nurse-led primary care. However, some individuals saw these nurses as general practitioner assistants with limited independence. In a similar vein, Hanley et al. (2013) discovered that even while customers were satisfied with nurse telemonitoring of blood pressure, a number of them chose to directly contact the doctor instead of going via the nurse.

6. The primary care nurses

This study examined the role expansion of primary care nurses as intervention leaders, as well as their ability to fulfill this role and the ambiguity surrounding it. The research referenced several studies by Hanley et al. (2013, 2015), Hegney et al. (2013), Zwar et al. (2011), Halcomb, Furler, et al. (2015), Mahomed et al. (2012), and McQuigg et al. (2008). The implementation of the intervention allowed primary care nurses to broaden their existing participation in health promotion activities within the limits of their professional responsibilities (Hanley et al., 2013; Hegney et al., 2013; McLeod et al., 2005). Hegney et al. (2013) discovered that their nurse-led intervention for managing chronic diseases was an innovative approach that significantly improved job satisfaction and confidence among primary care nurses. In a similar vein, Beighton et al. (2015) discovered that primary care nurses have a strong sense of identity, seeing their professional knowledge, abilities, and experience as the suitable qualities for delivering interventions. The trust in the primary care nurses' skills was also expressed by GPs, as documented by Hegney et al. (2013) and Zwar et al. (2011). Multiple studies have shown that nurses' confidence continued to influence their practice even after the intervention (Beighton et al., 2015; Hegney et al., 2013).

7. Conclusion

This study provides evidence that nurse-led treatments for lifestyle risk factor reduction and chronic disease management in primary care are both acceptable and feasible. Consumers expressed significant satisfaction with nurse-led care, and the interventions demonstrated the potential of primary care nurses' role. Nurse-led models need professional, organizational, and policy adjustments to assure their sustainability, since they deviate from existing practice. Given the dynamic nature of the primary care nurse's responsibilities and the lack of sufficient evidence, it is necessary to do more rigorous research on nurse-led interventions in primary care. Specifically, conducting rigorous randomized control trials to assess the effects of these treatments on health outcomes and cost-effectiveness has the potential to provide a stronger evidence foundation for nurse-led care in general practice. This, in turn, may provide valuable insights for shaping future policy decisions.

To properly evaluate nurse-led interventions for chronic disease management and lifestyle risk factor reduction in primary care, it is crucial to comprehend the elements that influence their feasibility and acceptability. Although it is crucial to assess the effects of treatments on health outcomes, it is also critical to comprehend the intricate aspects of implementing these Chelonian Conservation and Biology https://www.acgpublishing.com/

interventions. This knowledge is necessary to provide valuable insights to policy makers and clinical practitioners, ensuring that the intervention is faithfully and effectively implemented. This analysis has emphasized the need for improved health policy to enhance the ability of primary care nurses to participate in chronic disease management and treatments aimed at reducing lifestyle risk factors in primary care settings. Enhanced adoption of nurse-led treatments in primary care might be facilitated by improved financing models, extended educational paths, and greater support for the primary care nursing position. Furthermore, it is crucial to assess the influence of the intervention on nursing practice to guarantee the provision of adequate support for nurses, hence promoting safe practice and maximizing the quality of nursing care.

References

- 1. Bazeley, P. (2013). Qualitative data analysis: Practical strategies. London: SAGE.
- Beighton, C., Victor, C., Normansell, R., Cook, D., Kerry, S., Iliffe, S., ... Harris, T. (2015). "It's not just about walking..it's the practice nurse that makes it work": A qualitative exploration of the views of practice nurses delivering complex physical activity interventions in primary care. *BMC Public Health*, 15, 1–15.
- 3. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, **3**(2), 77–101.
- 4. Clossick, E., & Woodward, S. (2014). Effectiveness of alcohol brief interventions in general practice. *British Journal of Nursing*, **23**(11), 574–580.
- 5. Condon, J., Willis, E., & Litt, J. (2000). The role of the practice nurse: An exploratory study. *Australian Family Physician*, **29**(3), 272–277.
- 6. Desborough, J., Phillips, C., Banfield, M., Bagheri, N., & Mills, J. (2015). Impact of nursing care in Australian general practice on the quality of care: A pilot of the Patient Enablement and Satisfaction Survey (PESS). *Collegian*, **22**, 207–214.
- Furler, J. S., Blackberry, I. D., Walker, C., Manski-Nankervis, J.-A., Anderson, J., O'Neal, D., ... Best, J. (2014). Stepping up: A nurse-led model of care for insulin initiation for people with type 2 diabetes. *Family Practice*, **31**(3), 349–356.
- 8. Halcomb, E. J. (2009). Feasibility and sustainability of a model of multidisciplinary case conferencing in residential aged care. *Australian Journal of Primary Health*, **15**(3), 238–243.
- 9. Halcomb, E. J., Davidson, P., Daly, J., Yallop, J., & Tofler, G. (2004). Australian nurses in general practice based heart failure management: Implications for innovative collaborative practice. *European Journal of Cardiovascular Nursing*, **3**(2), 135–147.

- Halcomb, E. J., Davidson, P. M., Salamonson, Y., & Ollerton, R. (2008). Nurses in Australian general practice: Implications for chronic disease management. *Journal of Clinical Nursing*, 17(5A), 6–15.
- Halcomb, E., Davies, D., & Salamonson, Y. (2015). Consumer satisfaction with practice nursing: A cross-sectional survey in New Zealand general practice. *Australian Journal of Primary Health*, 21(3), 347–353.
- Halcomb, E., Furler, J., Hermitz, O., Blackberry, I., Smith, J., Richmond, R., & Zwar, N. (2015). Process evaluation of a practice nurse-led smoking cessation trial in Australian general practice: Views of general practitioners and practice nurses. *Family Practice*, **32**(4), 468–473.
- 13. Halcomb, E. J., Meadley, E., & Streeter, S. (2009). Professional development needs of general practice nurses. *Advances in Contemporary Nursing*, **32**(1–2), 201–210.
- Halcomb, E. J., Moujalli, S., Griffiths, R., & Davidson, P. M. (2007). Effectiveness of general practice nurse interventions in cardiac risk factor reduction amongst adults: A systematic review. *International Journal of Evidence-Based Healthcare*, 5(3), 269–295.
- 15. Halcomb, E. J., Peters, K., & Davies, D. (2013) A qualitative evaluation of New Zealand consumers perceptions of general practice nurses. *BMC Family Practice*, **14**(26).
- Halcomb, E. J., Salamonson, Y., Davidson, P. M., Kaur, R., & Young, S. A. M. (2014) The evolution of nursing in Australian general practice: A comparative analysis of workforce surveys ten years on. *BMC Family Practice* 15(52).
- 17. Halcomb, E. J., Stephens, M., Ashley, C., Foley, E., & Bryce, J. (2016). Nursing competency standards in the primary health care setting: An integrative review. *Journal of Clinical Nursing*, **25**(9), 1193–1205.
- Hallinan, C. M., & Hegarty, K. L. (2016). Advanced training for primary care and general practice nurses: Enablers and outcomes of postgraduate education. *Australian Journal of Primary Health*, 22(2), 113–122.
- 19. Hanley, J., Fairbrother, P., McCloughan, L., Pagliari, C., Paterson, M., Pinnock, H., ... McKinstry, B. (2015). Qualitative study of telemonitoring of blood glucose and blood pressure in type 2 diabetes. *British Medical Journal Open*, **5**(12),
- 20. Hanley, J., Ure, J., Pagliari, C., Sheikh, A., & McKinstry, B. (2013). Experiences of patients and professionals participating in the HITS home blood pressure telemonitoring trial: A qualitative study. *British Medical Journal Open*, **3**(5),
- 21. Hegney, D. G., Patterson, E., Eley, D. S., Mahomed, R., & Young, J. (2013). The feasibility, acceptability and sustainability of nurse-led chronic disease management in Australian Chelonian Conservation and Biology https://www.acgpublishing.com/

general practice: The perspectives of key stakeholders. *International Journal of Nursing Practice*, **19**(1), 54–59.

- Hoare, K. J., Mills, J., & Francis, K. (2012). The role of government policy in supporting nurse-led care in general practice in the United Kingdom, New Zealand and Australia: An adapted realist review. *Journal of Advanced Nursing*, 68(5), 963–980.
- 23. Keleher, H., & Parker, R. (2013). Health promotion by primary care nurses in Australian general practice. *Collegian*, **20**(4), 215–221.
- Kennedy, A., Rogers, A., Bowen, R., Lee, V., Blakeman, T., Gardner, C., ... Chew-Graham, C. (2014). Implementing, embedding and integrating self-management support tools for people with long-term conditions in primary care nursing: A qualitative study. *International Journal of Nursing Studies*, 51, 1103–1113.
- Lock, C. A., Kaner, E., Heather, N., Doughty, J., Crawshaw, A., McNamee, P., ... Pearson, P. (2006). Effectiveness of nurse-led brief alcohol intervention: A cluster randomized controlled trial. *Journal of Advanced Nursing*, 54(4), 426–439.
- 26. Mahomed, R., St John, W., & Patterson, E. (2012). Understanding the process of patient satisfaction with nurse-led chronic disease management in general practice. *Journal of Advanced Nursing*, **68**(11), 2538–2549.
- 27. McInnes, S., Peters, K., Bonney, A., & Halcomb, E. (2015). An integrative review of facilitators and barriers influencing collaboration and teamwork between general practitioners and nurses working in general practice. *Journal of Advanced Nursing*, **71**(9), 1973–1985.
- McLeod, D., Cornford, E., Pullon, S., de Silva, K., & Simpson, C. (2005). Can Quit Practice: A comprehensive smoking cessation programme for the general practice team. *New Zealand Medical Journal*, **118**(1213), U1415–U1415.
- McQuigg, M., Brown, J. E., Broom, J. I., Laws, R. A., Reckless, J. P. D., Noble, P. A., ... Radziwonik, S. (2008). Engaging patients, clinicians and health funders in weight management: The Counterweight Programme. *Family Practice*, 25(Suppl 1), i79–i86.
- 30. Merrick, E., Fry, M., & Duffield, C. (2014). Australian practice nursing: Collaboration in context. *Journal of Clinical Nursing*, **23**(23/24), 3525–3532.
- O'Donnell, C. A., Jabareen, H., & Watt, G. C. M. (2010). Practice nurses' workload, career intentions and the impact of professional isolation: A cross-sectional survey. *BMC Nursing*, 9, 1–10.

- 32. Parkinson, A. M., & Parker, R. (2013). Addressing chronic and complex conditions: What evidence is there regarding the role primary healthcare nurses can play? *Australian Health Review*, **37**(5), 588–593.
- 33. Phillips, C., & Hall, S. (2013). Nurses and the wise organisation: Techne and phronesis in Australian general practice. *Nursing Inquiry*, **20**(2), 121–132.
- 34. Pluye, P., Gagnon, M. P., Griffiths, F., & Johnson-Lafleur, J. (2009). A scoring system for appraising mixed methods research and concomitantly appraising qualitative, quantitative and mixed methods primary studies in Mixed Studies Reviews. *International Journal of Nursing Studies*, 46(4), 529–546.
- 35. Sargent, G. M., Forrest, L. E., & Parker, R. M. (2012). Nurse delivered lifestyle interventions in primary health care to treat chronic disease risk factors associated with obesity: A systematic review. *Obesity Reviews*, **13**(12), 1148–1171.
- 36. Sofaer, S., & Firminger, K. (2005). Patient perceptions of the quality of health services. *Annual Review of Public Health*, **26**, 513–559.
- 37. Tierney, E., McEvoy, R., O'Reilly-de Brún, M., Brún, T., Okonkwo, E., Rooney, M., ... MacFarlane, A. (2016). A critical analysis of the implementation of service user involvement in primary care research and health service development using normalization process theory. *Health Expectations*, 19(3), 501–515.
- 38. Tong, A., Flemming, K., McInnes, E., Oliver, S., & Craig, J. (2012). Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. *BMC Medical Research Methodology*, **12**(181).
- 39. Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human Resource Development Review*, **4**(3), 356–367.
- 40. Verwey, R., van der Weegen, S., Tange, H., Spreeuwenberg, M., van der Weijden, T., & de Witte, L. (2012). Get moving: The practice nurse is watching you! A case study of the user-centred design process and testing of a web-based coaching system to stimulate the physical activity of chronically ill patients in primary care. *Informatics In Primary Care*, 20(4), 289–298.
- 41. Vogus, T. J., & McClelland, L. E. (2016). When the customer is the patient: Lessons from healthcare research on patient satisfaction and service quality ratings. *Human Resource Management Review*, **26**(1), 37–49.
- 42. White, D., Oelke, N. D., Besner, J., Doran, D., Hall, L., & Giovannetti, P. (2008). Nursing scope of practice: Descriptions and challenges. *Nursing Leadership Academy of Canadian Executive Nurses*, **21**(1), 44.

- 43. Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. *Journal* of Advanced Nursing, **52**(5), 546–553.
- 44. Wilcox, S. (2014). *Chronic diseases in Australia: The case for changing course*. In Australian Health Policy Collaboration Issues paper No. 2014-02 Melbourne: Australian Health Policy Collaboration.
- 45. Zwar, N. A., Richmond, R. L., Forlonge, G., & Hasan, I. (2011). Feasibility and effectiveness of nurse-delivered smoking cessation counselling combined with nicotine replacement in Australian general practice. *Drug and Alcohol Review*, **30**(6), 583–588.
- 46. Zwar, N. A., Richmond, R. L., Halcomb, E. J., Furler, J. S., Smith, J. P., Hermitz, O., ... Borland, R. (2015). Quit in general practice: A cluster randomized trial of enhanced inpractice support for smoking cessation. *Family Practice*, **32**(2), 173–180.