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**OBJECTIVES** 

**HYPOTHESES** 

RESEARCH METHODOLOGY

**RESULTS & DISCUSSION** 

**FINDINGS** 

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## STAFF DEVELOPMENT FOR AUSTRALIAN HEALTHCARE PROFESSIONALS

DR. DAVID JOSEPH PEREIRA LECTURER SCHOOL OF HEALTH SCIENCES HEALTH CAMPUS UNIVERSITI SAINS MALAYSIA MALAYSIA

#### **ABSTRACT**

Staff development in healthcare is generally accepted as being beneficial for clinical workers and service delivery in healthcare organisations. Professional development in healthcare has been positively linked to staff satisfaction, staff retention and improved patient care quality. Despite the benefits of staff development, healthcare professionals have indicated that the scope and potential for training and education could be enhanced further. With the aim of enhancing staff development in healthcare, this Australian study sought to: explore the implementation of development programs; and identify issues and areas for improvement in healthcare staff development. A total of 152 clinical staff from seven hospitals in Sydney, Australia were enrolled. The participating clinical staff comprised of medical, nursing and allied health professionals. Twenty four focus groups and eight interviews were conducted with the healthcare professionals to investigate staff development policy and practice. Staff development across hospitals was found to vary according to professional discipline group with medical, nursing and allied health workers having different opportunities and training requirements. The participants also implied development opportunities to be dependent upon staffing levels and workload. Given the largely discipline based development approach, staff development that transcends professional boundaries may be an option in promoting teamwork among multidisciplinary healthcare staff. To reduce tradeoffs between staff development and staff workload demands, effective and efficient coordination of staffing with work obligations could be beneficial in ensuring healthcare workers are able to undertake necessary development and training.

## **KEYWORDS**

Healthcare, staff development.

### **INTRODUCTION**

taff development in healthcare is generally accepted as being beneficial for clinical workers and to contribute towards positive performance outcomes (Lammintakanen et al., 2008; Wilcock et al., 2009). Professional development in healthcare is positively linked to staff satisfaction, staff retention and quality patient care (Levett-Jones, 2005). It is suggested that staff development specialists can improve the quality of care by ensuring clinicians are taught the skills to search and evaluate evidence, and by promoting the support and reward of evidence-based practice in healthcare environments (Krugman, 2003). Healthcare staff training and development cover areas that include mandatory education (Franck and Langenkamp, 2000), communication skills (Brown et al., 1999), team working (Nielsen et al., 2007), quality improvement (Boonyasai et al., 2007), leadership (McAlearney, 2006) and clinical skills (Hilsenroth et al., 2002).

### **REVIEW OF LITERATURE**

A variety of approaches have been utilised and encouraged to promote healthcare staff development (Bartlett, 2001; Beaubien and Baker, 2004; Waddell and Dunn, 2005; Plastow and Boyes, 2006). For nursing staff development, peer coaching which builds upon prior knowledge and skills is advocated as a viable method for ensuring the transfer of skills and behaviours learnt in training to clinical practice (Waddell and Dunn, 2005). Multidisciplinary continuing professional development group activities such as journal clubs have the advantage of improving team working across traditional professional roles and enabling better service delivery (Plastow and Boyes, 2006). Beaubien and Baker (2004) reported that while the association between simulation training and patient safety outcomes has not been clearly demonstrated, the use of simulation for training teamwork skills in healthcare has been found to improve teamwork attitudes and behaviours. A study by Bartlett (2001) involving 337 registered nurses from five hospitals found significant relationships between organizational commitment and aspects of training such as duration, access, learning motivation, support and perceived benefits.

## **NEED/IMPORTANCE OF THE STUDY**

Despite the wide range and reported benefits of healthcare development options, healthcare staff and managers have indicated that training and education practices are under-developed (Lammintakanen *et al.*, 2008) and resources for education are often reduced or eliminated when healthcare organizations are seeking to cut costs (Lindy and Reiter, 2006). There is a need for accessible, flexible and portable development solutions in enabling clinicians to attend training (Ward and Wood, 2000). Efforts to promote healthcare staff development could consider evaluating and revising the required scope, objectives, benefits and work system considerations when implementing the range of existing education and training options.

### **OBJECTIVES**

With the aim of enhancing staff development in healthcare, this study sought to:

- 1. Explore the implementation of staff development programs for healthcare professionals in an Australian context.
- 2. Identify issues and areas for improvement in healthcare staff development with possible implications for service delivery.

### **RESEARCH QUESTIONS**

- 1. How are staff development programs implemented for healthcare professionals in an Australian context?
- 2. What are issues and areas for improvement in healthcare staff development that might influence service delivery?

### RESEARCH METHODOLOGY

A total of 152 clinical staff from seven hospitals in Sydney, Australia were enrolled. The participating clinical staff comprised of medical, nursing and allied health professionals. Twenty four focus groups and eight interviews were conducted between March and October 2010 with the healthcare professionals to investigate staff development policy and practice. Focus groups provided the advantage of generating data from the communication between research participants responding to open ended questions from the interviewer (Kitzinger, 1995). The stimulation of interaction between research participants is a feature which distinguishes focus groups from one-to-one interviews or questionnaires (Kitzinger, 1994). While minority or sensitive views may not be voiced in a focus group (Buston *et al.*, 1998), this problem was not deemed significant for this study. The focus groups in this study were designed mainly to evaluate staff development and therefore did not directly require participants to disclose sensitive issues with regards to their team or performance. The sampling strategy of recruiting clinical workers from seven different healthcare organizations made it impractical to conduct individual interviews with all 152 staff given the time and cost

constraints faced in completing this study. Focus groups which enabled multiple participants to be grouped together for eliciting information provided a manageable and practical method. Nevertheless, eight interviews were necessary to accommodate staff unable to attend focus group sessions.

Content analysis process employed in healthcare was used in this study (Elo and Kyngäs, 2008). That is, digital recordings from focus group and interview sessions with clinical staff were transcribed for analysis. Transcripts from sessions with clinical staff were combined into documents by hospital. The combining of transcripts by hospital aided the identification of issues or unique features at a specific hospital and common elements across participants. The researcher undertook line-by-line analysis of each hospital transcript set (Bradley *et al.*, 2009). The synthesis of findings involved comparing data from research sessions at individual hospitals and contrasting data across hospitals. While every effort was made to assure participants of research confidentiality, it is acknowledged that the use of self-reported data presents the possibility of participant bias.

#### **FINDINGS**

Clinical staff responses common across hospitals suggested staff development to vary according to professional discipline group. These responses present the varying staff development requirements and opportunities by professional disciplines namely nursing, medical and allied health staff:

"Our nursing registration now dictates that we have 20 points or more for development. That is to maintain our registration. Sometimes, our nurse educator and manager give us some study leave." (Hospital A, Clinical staff focus group iii)

"Medical registrars have a monthly training session which they are encouraged to attend. Plus additional workshops and programs that are run on weekends and we run some of those here. Nursing staff have regular in-service programs which are run on the ward. The allied health staff have at least once a week educational meetings." (Hospital E, Clinical staff interview)

"For medical staff, all specialists are actually enrolled in the continuous professional development program and we need to fulfill a certain requirement for our ongoing registrations." (Hospital F, Clinical staff focus group ii)

"Allied health physiotherapy in terms of professional development has about \$500 per person in the budget per year." (Hospital G, Clinical staff focus group ii) Clinical responses from all hospitals indicated opportunities for development to depend on staffing levels and workload. The tradeoff between staffing requirements and workload with staff development in the hospitals is observable in the following responses:

"The bottom line is, you have to do a flow chart to ensure that provision of services isn't compromised because it is compromised. How could it not be? But we all lie and say 'No, it isn't' because people need to go for professional development." (Hospital A, Clinical staff focus group i)

"I think the issue when we do attend those development programs, our patient care suffers from understaffing. But I think in the long run patients benefit from the extra skills we bring back from those courses." (Hospital B, Clinical staff focus group ii)

"There were a lot of problems last year because of staffing. So development programs got cancelled." (Hospital C, Clinical staff focus group iv)

Development was necessary for maintaining professional registration in clinical input from Hospitals A, B, C, D and F. Development was said to be encouraged in clinical responses from Hospitals E, F and G. However, a clinical response from Hospital C suggested that development is neither encouraged nor discouraged. Clinical input obtained from Hospital B mentioned that staff have to be self-motivated in personal development. While responses from Hospitals A, B, E and F indicated limited funding for development, clinical input from Hospital A suggested minimal and limited support for developing through educational courses. It was pointed out in clinical input that development was dependent on manager's approval (Hospitals C, F and G). Some development benefits mentioned by clinical staff across hospitals are study leave (Hospitals A, B, C, F and G), development allowance (Hospitals C and G) and sponsorship (Hospital D). The results indicate some variation in staff development feedback among the hospitals. However, the differentiating staff input obtained shows overlap with the commonly shared feedback, therefore suggesting development policy and practice to be fairly consistent across participating hospitals.

#### **CONCLUSIONS**

Development varying by professional group would be a reflection of the different roles played by the medical, nursing and allied health staff. Each professional group fulfilling a distinct clinical care function would naturally necessitate discipline specific development. While development is largely discipline based, there may be a need to ensure clinicians receive multidisciplinary team based development in keeping with service delivery requirements of healthcare organisations. The common finding of development opportunities being dependent upon staffing levels and workload, nevertheless shows how organisational level staffing and service level workload coordination can influence prospects for staff development in the healthcare context.

To enable more participation and derive optimum benefits from healthcare staff development initiatives and programs, it may be necessary for managers to efficiently and effectively coordinate staffing levels. Timely recruitment efforts together with the filling of staff vacancies might ensure existing clinical staff are not overly burdened to the extent of having to make tradeoffs between work obligations and training programs. A well-staffed healthcare organisation could therefore be a mitigating factor for medical, nursing and allied health professionals to undertake team focused development opportunities. Further research could examine staff development in relation to other managerial functions influencing healthcare delivery. Given the multidisciplinary nature of healthcare, studying the association between staff development with teamwork may also contribute in promoting healthcare service improvements and quality outcomes.

### REFERENCES

- 1. Bartlett, K. R. (2001). "The relationship between training and organizational commitment: A study in the health care field". Human Resource Development Quarterly, Vol. 12, No. 4, pp. 335-352.
- 2. Beaubien, J. M. & Baker, D. P. (2004). "The use of simulation for training teamwork skills in health care: how low can you go?". Quality and Safety in Health Care, Vol. 13, No. suppl 1, pp. i51-i56.
- 3. Boonyasai, R. T., Windish, D. M., Chakraborti, C., Feldman, L. S., Rubin, H. R. & Bass, E. B. (2007). "Effectiveness of teaching quality improvement to clinicians: a systematic review". JAMA: The Journal of the American Medical Association, Vol. 298, No. 9, pp. 1023-1037.
- 4. Bradley, P., Cooper, S. & Duncan, F. (2009). "A mixed-methods study of interprofessional learning of resuscitation skills". Medical Education, Vol. 43, No. 9, pp. 912-922.
- 5. Brown, J. B., Boles, M., Mullooly, J. P. & Levinson, W. (1999). "Effect of clinician communication skills training on patient satisfaction. A randomized, controlled trial". Annals of Internal Medicine, Vol. 131, No. 11, pp. 822-829.
- 6. Buston, K., Parry-Jones, W., Livingston, M., Bogan, A. & Wood, S. (1998). "Qualitative research". British Journal of Psychiatry, Vol. 172, No., pp. 197-199.
- 7. Elo, S. & Kyngäs, H. (2008). "The qualitative content analysis process". Journal of Advanced Nursing, Vol. 62, No. 1, pp. 107-115.
- 8. Franck, L. R. & Langenkamp, M. L. (2000). "Mandatory education via the computer: cost-effective, convenient, and creative". Journal for Nurses in Staff Development, Vol. 16, No. 4, pp. 157-163.
- 9. Hilsenroth, M. J., Ackerman, S. J., Clemence, A. J., Strassle, C. G. & Handler, L. (2002). "Effects of structured clinician training on patient and therapist perspectives of alliance early in psychotherapy". Psychotherapy: Theory, Research, Practice, Training, Vol. 39, No. 4, pp. 309-323.
- 10. Kitzinger, J. (1994). "The methodology of focus groups: the importance of interaction between research participants.". Sociology of Health & Illness, Vol. 16, No. 1, pp. 103-121.
- 11. Kitzinger, J. (1995). "Introducing focus groups". British Medical Journal, Vol. 311, No. 7000, pp. 299-302.
- 12. Krugman, M. (2003). "Evidence-based practice. The role of staff development". Journal for nurses in staff development: JNSD: official journal of the National Nursing Staff Development Organization, Vol. 19, No. 6, pp. 279-285.
- 13. Lammintakanen, J., Kivinen, T. & Kinnunen, J. (2008). "Human resource development in nursing: views of nurse managers and nursing staff". Journal of Nursing Management, Vol. 16, No. 5, pp. 556-564.
- 14. Levett-Jones, T. L. (2005). "Continuing education for nurses: a necessity or a nicety?". Journal of continuing education in nursing, Vol. 36, No. 5, pp. 229-233.
- 15. Lindy, C. & Reiter, P. (2006). "The financial impact of staff development". Journal of continuing education in nursing, Vol. 37, No. 3, pp. 121-127.

- 16. McAlearney, A. S. (2006). "Leadership development in healthcare: a qualitative study". Journal of organizational behavior, Vol. 27, No. 7, pp. 967-982.
- 17. Nielsen, P. E., Goldman, M. B., Mann, S., Shapiro, D. E., Marcus, R. G., Pratt, S. D., Greenberg, P., McNamee, P., Salisbury, M., Birnbach, D. J., Gluck, P. A., Pearlman, M. D., King, H., Tornberg, D. N. & Sachs, B. P. (2007). "Effects of teamwork training on adverse outcomes and process of care in labor and delivery: a randomized controlled trial". Obstetrics & Gynecology, Vol. 109, No. 1, pp. 48-55
- 18. Plastow, N. A. & Boyes, C. (2006). "Unidisciplinary continuing professional development in a multidisciplinary world: experiences from practice". Work Based Learning in Primary Care, Vol. 4, No. 4, pp. 322-344.
- 19. Waddell, D. L. & Dunn, N. (2005). "Peer coaching: the next step in staff development". Journal of continuing education in nursing, Vol. 36, No. 2, pp. 84-89.
- 20. Ward, J. & Wood, C. (2000). "Education and training of healthcare staff: the barriers to its success". European journal of cancer care, Vol. 9, No. 2, pp. 80-85.
- 21. Wilcock, P. M., Janes, G. & Chambers, A. (2009). "Health care improvement and continuing interprofessional education: continuing interprofessional development to improve patient outcomes". Journal of Continuing Education in the Health Professions, Vol. 29, No. 2, pp. 84-90.



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