MALAYSIAN SENIOR DENTAL OFFICERS' PERCEPTIONS OF THE EMPLOYABILITY OF MALE DENTAL NURSES AND POSSIBLE POLICY IMPLICATIONS

N.A.M. Nor, N. Murat, A. Mohamed, A. Gamboa. Malaysian senior dentists' perceptions of the employability of male dental nurses and possible policy implications Annal Dent Univ Malaya 2012; 19(2): 56–61.

ABSTRACT

Background: In Malaysia, training to enter dental nursing profession is only open to women. Ironically, there are no such gender restrictions on training for any other health related professions in Malaysia. Aim: Therefore this study aims to assess the perceptions of Malaysian Senior Dental Officers (SDOs) towards the employability of male workers in the dental nursing profession and to compare findings from male and female SDOs. Methods: This cross sectional study was carried out on all SDOs in Ministry of Health, Malaysia, using a self-administered questionnaire. Descriptive statistics and a chi square test were used to address the study objectives. Results: Of the 112 participants, 78 SDOs returned the questionnaire, yielding a response rate of 70%. The majority of SDOs had positive perceptions of the employment of male dental nurses. It was indicated that gender is an important indicator for workforce development, and that the employment of both male and female dental nurses would enhance productivity. Almost 70% of SDOs perceived that the productivity of oral health service would be enhanced by having male and female dental nurses but 84.6% disagreed that male dental nurses would be more productive than female. Two thirds of SDOs disagreed that male dental nurses would increase satisfaction among male patients. About 64% of male SDOs disagreed that dental nursing profession is associated with female traits. There was no significant difference between perceptions by male and female SDOs for any statements. Conclusion: The majority of Malaysian SDOs have positive perceptions towards the employability of male dental nurses, and perceived dental nursing as a suitable profession for both genders. Training for the dental nursing profession should therefore be made available for men.

Key words: dentists' perceptions, male dental nurses, policy implication, Malaysia

INTRODUCTION

There has been a rise in the number of female workers in many sectors, including medicine and dentistry (1-

Original Article

N.A.M. Nor¹, N. Murat¹, A. Mohamed¹ and A. Gamboa²

¹Department of Community Dentistry, Faculty of Dentistry, University of Malaya, 50603, Kuala Lumpur, Malaysia E-mail: azlida@um.edu.my Tel: 603–7967 4805 Fax: 603–7967 4532

²Centre for Clinical & Diagnostic Oral Sciences, Institutes of Dentistry, Queen Mary's School of Medicine and Dentistry, University of London.

Corresponding author: Dr. Nor Azlida Mohd Nor

3). Globally, many issues have been debated in relation to the implications of gender imbalance in the healthcare workforce such as discrepancies between male and female workers in their working hours, productivity, choice of practice location and salary schemes (3-5). Many countries have therefore made extra efforts to promote gender mainstreaming and equality in the labour force (5,6). Various strategies have been carried out by planners to improve gender employability in the health care sector by encouraging gender equality in career opportunities and development, creating support groups for career planning at school and university level and through promotional activity in the media (7).

Dental auxiliaries worldwide are predominantly female (6,8). Approximately 96.5% of European dental auxiliaries are female (6). Traditionally, women are believed to be more caring and compassionate and this supposedly makes jobs such as dental auxiliary more suited to them (6,7). Indeed, it has been argued that men and women have different traits that make them suitable only for particular types of job (6). To date, the dental nursing profession in the public service in Malaysia has been restricted to women (9). Ironically, this gender restriction is only applicable to dental nursing training. There are no such gender restrictions on applications to enter other health allied science training such as for dental technologists, dental surgery assistants, medical assistants and medical nurses (9).

Gender imbalance also exists in the Malaysian medical workforce where the number of females are more than the male workers (10,11). However, recently there have been positive developments in the medical

public and private hospitals where more males are being employed as medical nurses (10). Similar progress in the medical services has also been observed in Canada (12), Turkey (13) and Taiwan (7). Having men in the nursing profession is believed to add value, improve the image of the profession and increase the diversity and mix of skills in healthcare teams (13). Gender diversity in the profession is believed to result in better decision making, provide a positive competitive environment, attract a wider group of customers and lead to creative and innovative services (14,15). As for patients, they have options to choose the gender of supporting health care providers whom they prefer which eventually increase their comfort level (11,14,16,17).

The dental nursing profession has evolved worldwide but the femininity of the profession remains the same. As a consequence, men rarely choose to join the dental nursing profession. Globally, a review of the literature has identified that there is little research evidence concerning the imbalance in the dental workforce in terms of the male/female ratio (18,19). In Malaysia, no reasons have been given as to why the employment of dental nurses is only open to women (9). Little is also known about the acceptance among health care professionals and members of the public towards the employment of male dental nurses. It is therefore important to seek the views of different stakeholders about allowing men into this femaledominated profession before any amendment to the policy is made. One of the main stakeholders is the dentists themselves. Therefore, this study aims to obtain the views of Senior Dental Officers (SDOs) in the Ministry of Health, Malaysia on the employability of men in the dental nursing profession, and to discover whether there are any differences between perceptions by male and female SDOs of this gender issue. SDOs were chosen because they are the key oral health planners at district level in all states in Ministry of Health, Malaysia and hence they will be in a position to influence or oppose the employment of male dental nurses. The findings from this study could add value to future evidence-based human resource planning in Malaysia.

MATERIALS & METHODS

A cross sectional survey was conducted using a selfadministered questionnaire, involving all the SDOs in the Ministry of Health, Malaysia (n=112). The questionnaire was developed on the basis of a literature review and an expert group discussion involving two dentists and two public health specialists to decide on the items for the questionnaire. The questionnaire consisted of two parts. Part A consisted of questions on the respondent's demographic profile including their gender, age, working experience and postgraduate qualifications in Dental Public Health. Part B consisted

of seven close-ended questions (Table 1) with a five point Likert-scale ranging from strongly disagree (scale 1) to strongly agree (scale 5). The questionnaire was face-validated by three dental public health experts; two from the University of London and one from the University of Malaya. They were asked to provide feedback independently on the overall content and structure of the questionnaire. The feedback received from the experts only resulted in minor structural adjustments. The questionnaire was then piloted on seven SDOs who were working in one of the states of Malaysia. They were invited to give comments on the clarity and relevance of each question in the questionnaire. The response obtained was mostly positive and no additional changes were needed to the questionnaire.

Ethical approval was obtained from the Research Ethics Committee of the University of London (QMREC0449) and permission to conduct this study on Malaysian dentists was granted by the Senior Director of the Malaysian Oral Health Division. After the permission had been obtained, another letter was sent seeking a list of names and basic information of all the registered SDOs in the Ministry of Health, Malaysia. The State Deputy Director of Health (Dental Division) for all of the 15 states of Malaysia assisted in distributing the questionnaire to all SDOs, and the questionnaire was kept anonymous.

The questionnaires, worded in English, were posted to each SDO together with a research information sheet, a consent form and a self adressed postage paid envelope. Participants were asked to respond within two weeks of receiving the questionnaire, and a follow-up mailing was conducted one month after the date of questionnaire distribution.

Data processing and statistical analysis

Data were analysed using SPSS software version 12. Descriptive statistics and chi square test were used to address the study objectives. Results for each question were recoded into three groups: scores of 1 to 3 were classified as 'disagree', and scores of 4 and 5 were classified as 'agree'. Scores of 3 (neutral) were recoded as 'disagree' because they were considered uncertain responses for the purposes of clear comparison with those who were in agreement. Chi square test was used to measure the association between male and female SDOs' perceptions of the employability of men in the dental nursing profession in Malaysia. Significance level was set at p < 0.05.

RESULTS

Of the 112 participants, 78 SDOs completed and returned the questionnaire, giving a response rate of 70%. Two-thirds (68%) of the respondents were females. Their age ranged from 27 to 57 years old, with a mean age of 44.9. One-third of the participants (36%) were

qualified with a Masters in Dental Public Health (DPH) and the rest had a dental degree as the highest level of education. More than half (64.1%) of the respondents had less than five years' working experiences.

Overall, most of the SDOs had positive perceptions towards the employability of male workers in dental nursing (Table 1) where almost 65% of them agreed that the 'introduction of male dental nurses into the health service should be encouraged'. Independently, 60% of male and 66% female SDOs agreed with this statement. Two-thirds of SDOs (70.5%) disagreed that 'male patients would be more satisfied if they were treated by male dental nurses' and a similar proportion was observed in both genders. More than half of SDOs (59.7%) believed that 'the total number of male and female dental nurses is an important indicator in future workforce development', with no obvious difference between male and female DDOs.

Although two-thirds of SDOs (69.2%) perceived that 'employing both female and male dental nurses could enhance service productivity', the majority of them (84.6%) disagreed that 'male dental nurses can be more productive than female dental nurses'. There was slightly higher disagreement from female SDOs (86.8%) compared to male SDOs (80.0%) about this statement. Nearly half of male (48.0%) and half of female (50.9%) SDOs agreed that 'the dental nursing profession is more suitable for females'. Slightly more than half of SDOs (55.1%) disagreed that 'female dental nurses can deliver better quality care because they are more caring and compassionate in nature than male dental nurses'. There was a higher proportion of disagreement from male SDOs (64.0%) on this statement. Similar patterns of perception were observed between male and female SDOs for all of the seven statements in the questionnaire. No statistically significant differences were found between the perceptions of SDOs of either gender for any statements (Table 1).

DISCUSSION

This is the first study that has attempted to obtain an insight into the views of dentists on gender issues in the Malaysian dental nursing profession. The key finding from this study suggests that SDOs have positive views towards the employability of male dental nurses in Malaysia. There was no obvious difference between the perceptions of male and female SDOs for any statement on the questionnaire. Similarly, only a few studies have reported a significant difference in the perceptions of female and male respondents in relation to gender issues in medical nursing (4,13). This pattern may be explained by a shift towards equal gender opportunities in the health care workforce. Looking at medical counterparts, there is a growing number of male medical nurses being employed in Malaysia (10). The International Council of Nurses in 2008 showed that the number of registered

 Table 1. Comparison between perceptions of male and female Senior Dental Officers (SDOs) towards the employability of male in dental nursing profession in Malaysia (N=78)

Questionnaire Items	Disagree N (%)			Agree N (%)			
	Male (n=25) ^a	Female (n=53) ^a	Total (n=78)	Male (n=25) ^a	Female (n=53) ^a	Total (n=78)	p value ^a
Q1. I believe that the introduction of male dental nurses rather than female dental nurses alone in the health system should be encouraged.	10 (40.0%)	18 (34.0%)	28 (35.9%)	15 (60.0%)	35 (66.0%)	50 (64.1%)	0.604
Q2. I believe that male patients would be more satisfied if they were treated by male dental nurses.	18 (72.0%)	37 (69.8%)	55 (70.5%)	7 (28.0%)	16 (30.2%)	23 (29.5%)	0.843
Q3. I believe that the total numbers of male dental nurses and female dental nurses are important indicators in future workforce development.*	10 (40.0%)	21 (39.6%)	31 (40.3%)	15 (60.0%)	31 (58.6%)	46 (59.7%)	0.974
Q4. I believe that male dental nurses can be more productive than female dental nurses.	20 (80.0%)	46 (86.8%)	66 (84.6%)	5 (20.0%)	7 (13.2%)	12 (15.4%)	0.438
Q5. I believe that the productivity of the oral health services will be enhanced by employing both female and male dental nurses.	7 (28.0%)	17 (32.1%)	24 (30.8%)	18 (72.0%)	36 (67.9%)	54 (69.2%)	0.716
Q6. I feel that dental nursing is more appropriate for females because they tend to be more caring and compassionate by their inborn nature.	13 (52.0%)	26 (49.1%)	39 (50.0%)	12 (48.0%)	27 (50.9%)	39 (50.0%)	0.808
Q7. I believe that female dental nurses can deliver better quality care because they are more caring and compassionate in nature than male dental nurses.	16 (64.0%)	27 (50.9%)	43 (55.1%)	9 (36.0%)	26 (49.1%)	35 (44.9%)	0.279

^a Chi-square test

* Sample do not equal to N=78 due to missing data

male nurses in Malaysia had increased steadily since their first employment in 2006 (10).

There are diverse views regarding the impact of men in medical nursing. A substantial literature reported that allowing male workers into the medical nursing profession can help to balance the staff, increase the mix of skills in the team and create a better working environment (13-15,21). The employment of both male and female dental nurses might also assist in the appropriate allocation of dental workload and placements. For example, research has shown that male nurses are more suitable to work in areas that need physical strength such as the Intensive Care Units (ICU), the operating room and the emergency department (13). This pattern in the medical setting might be mirrored in dentistry where male dental nurses could work in hospital-based dental setting that involves being on-call or work in dental operating rooms. In addition, some dental tasks in school services and mobile dental squads which require physical strength such as the heavy lifting of portable dental chairs and compressors could also be delegated to male dental nurses. Another study has found that male health care providers are more likely to work in rural areas and engage in community service (4). This suggests that one of the potential contributions of men in the dental nursing profession in Malaysia might include extensive involvement in community service especially in rural areas.

Although two-thirds of the SDOs (69.2%) believed that the productivity of oral health services could be enhanced by employing both female and male dental nurses, this does not stipulate that male dental nurses would be more productive than their female counter parts. In the Ministry of Health, Malaysia, staff are required to work full time and dental tasks are usually distributed equally among workers based on their respective qualifications. Also, apart from maternity leave entitlement, it is very seldom that female staffs are away from their jobs for a long period of time. This show that there is possible similar productivity between male and female staff working in the ministry. However, in countries where there is flexibility in working practices, female workers have been shown to work fewer hours or part time and they also to tend to take early retirement (5,6,22). In this scenario, there are possibilities that male workers will have higher productivity as they spend more days at work compared to female.

A study on patients attending a dental school in Northern California concluded that there was no gender preference when it came to choosing oral health care providers (23). This is in line with the results from the present study which shows that the majority of the SDOs disagreed that 'male patients would be more satisfied if they were treated by male dental nurses'. However the findings of this study contradict those from another local study which found that patients tended to choose health professional of the same gender as themselves (17). It is to be noted that the latter study assessed the perceptions of health care workers who worked in hospitals where most patients were adults. Dental nurses in Malaysia are only allowed to treat children below the age of seventeen, and this child population might not experience any difficulties about receiving care from someone of a different gender than themselves. This could explain the reasons why the SDOs in this study felt that no gender preferences existed.

Previous research has shown that the nursing profession in general is traditionally believed to be suitable for women because they are more caring and compassionate in nature (6,19). The findings from this study have shown that a higher proportion of male SDOs (64.0%) compared to female SDOs (50.9%) disagree that the dental nursing profession is associated with female traits. However, the difference was not statistically significant. This may suggest that respondents felt that the dental nursing profession in Malaysia is suitable for both genders and that there is a possible penetration of men in this profession in the future. It was recommended that equal opportunities be given to both genders when pursuing their career of choice (6). Looking at some other aspects of medical and dental nursing, the literature reported that recruiting men into the profession is a challenge. The potential barriers that have been stated include the image of the profession, low wages, career pathway restrictions and disapproval by peers and family members (4,6). Therefore, further research is needed before a change to the profession is made.

The results of this study should be interpreted in light of the following limitations. First, there is the possibility of respondents' bias in any self-reporting survey. Second, participants (n=7) involved in the pilot study were included in the main study and it could be argued that contamination may have occurred during piloting. However, in this study, no changes were required following the piloting, and the questionnaires were distributed to different states separately, so it is unlikely that any contamination occurred. Despite these limitations, this study has good external validity and the results represent national data which might be generalizable to oral health planners working in Ministry of Health, Malaysia.

Possible policy implications and future research recommendation

The results of this study demonstrated that oral health planners have positive attitudes towards the potential employment of male dental nurses. In policy terms, this suggests that the opportunity should be taken to introduce male dental nurses in Malaysia. Ensuring equal gender opportunities in Malaysia falls within the remit of the Public Services Commission, which should therefore work closely with the Ministry of Health to abolish the gender restrictions currently placed on the training of dental nurses, so as to bring the dental nursing profession into line with other health-related professions. Discussion is needed of a policy framework to establish career pathways for both male and female dental nurses in order to maximise gender diversity within the profession. This in turn will improve the career prospects and development of nonoperating auxiliaries, such as dental surgery assistants, by opening up to them the additional possibility of an alternative career in dental nursing. However, further study is needed to confirm the finding of present study. Future research should also explore the employability of men in the dental nursing profession in relation to the following issues; barriers to the recruitment of male dental nurses in Malaysia, factors influencing male students to choose dental nursing as a career, the social acceptability of male dental nurses among different stakeholders in Malaysia and to compare findings with other countries.

CONCLUSION

The majority of SDOs have positive perceptions of the employability of male dental nurses. There was no statistically significant difference between perceptions by male and female SDOs for any of the questionnaire items. Dental nursing in Malaysia is perceived to be a suitable profession for both women and men. Hence, policy changes to open the recruitment of Malaysian dental nurses to both genders should be considered.

ACKNOWLEDGEMENT

We would like to thank all Senior Dental Officers in Malaysian Ministry of Health who had participated in this study and the Senior Director of the Malaysian Oral Health and the State Deputy Director of Health (Dental Division) for their valued administrative support during data collection period.

REFERENCES

- Parkash H, Mathur VP, Duggal R. et al. Dental workforce issue: a global concern. J Dent Educ. 2006; 70(Suppl): 22-6.
- Mortazavi SMJ and Rashidi Nejad HR. Serious gender imbalance in medical and dentistry majors: how to prevent crisis. J Med Educ. 2005; 8(1): 12-6.
- 3. Dussault G and Dubois CA: Human resources for health policies: a critical component in health policies. Hum Resour Health. 2003; 1: 1.

- 4. Health Professions Resource Center, Center for Health Statistics. The feminization of the health care workforce: implication to Texas. Texan Department of State Health Services, 2011.
- 5. Standing H: Gender: a missing dimension in human resource policy and planning for health reforms. Human Resource Devel J. 2000; 4(1): 1-16.
- Luciak-Donsberger C. The effects of gender disparities on dental hygiene education and practice in Europe. Int J Dent Hyg. 2003; 1(4): 195-212.
- Yang CI, Gau ML, Shiau SJ, et al. Professional career development for male nurses. J Adv Nurs. 2004; 48(6): 642-50.
- American Dental Hygienists Association (ADHA). Survey of dental hygienists in the United States, Executive Summary, 2007.
- Public Services Commission of Malaysia. Latihan Jururawat Pergigian Malaysia. http://www.spa.gov. my/Portal/Deskripsi_Tugas/LatihanSepara Perubatan/3314. Last accessed on 25th June 2012.
- Alexander H. Upper secondary male students' perception of nursing as a career choice. International Journal for Advancement of Science & Arts 2010; 1(1): 46-61. http://www.ucsi.edu.my/ cervie/pdf/paperHSc1.pdf. Last accessed on 30th May 2012.
- 11. Tong SF, Low WY, Ismail SB, et al. Malaysian primary care doctors' views on men's health: An unresolved jigsaw puzzle. BMC Fam Pract. 2011; 12(29): 1-10.
- Bartfay WJ, Bartfay E, Clow KA, et al. Attitudes and perceptions towards men in nursing education. The Internet Journal of Allied Health Sciences & Practice 2010; 8(2): 1-7. http://ijahsp.nova.edu/ articles/Vol8Num2/pdf/Bartfay.pdf. Last accessed on 1st May 2012.
- 13. Ozdemir AM, Akansel N and Tunk GC. Gender and career: female and male nursing students' perceptions of male nursing role in Turkey. Health Science Journal 2008; 2(1): 153-61. http://www. hsj.gr/volume2/issue3/5GENDER_AND_ CAREER_153_161.pdf. Last accessed on 10th June 2012.

- Tiffany MS. Are you my nurse? an examination of men in nursing. Department of Sociology, Indiana University, 2008. Master's dissertation.
- Evans JA. Men in nursing: issues of gender segregation and hidden advantage. J Adv Nurs 1997; 26: 226-31.
- 16. Sushma V. Obstacles for male nurses. Malaysian New Straits Times. 2010, Feb 17.
- 17. Al-Araji LIY and Aminatuzzahrah A. Perceptions on male nurse among health care workers in Hospital Tengku Ampuan Afzan: Proceedings of the First Nursing Conference, Kuantan, Malaysia; 10-11 October 2008.
- Patel R, Eaton KA, Garcia A, et al. Factors influencing dental practitioner performance: A summary of recent literature review. Oral Health Dent Manag. 2011; 10(3): 119-30.

- Zurn P, Dal Poz MR, Stilwell B, et al. Imbalance in the health workforce. Hum Resour Health. 2004; 2(1): 13.
- 20. Oral Health Division, Ministry of Health, Malaysia. Oral health care in Malaysia, Ministry of Health, Malaysia, 2005.
- 21. Evans JA. Men in nursing, issues of gender stereotypes and the sexualisation of men nurses touch. J Adv Nurs. 2002; 40(4): 441-48.
- 22. Satur J, Gussy M, Mario R, et al. Patterns of dental therapists' scope of practice and employ-ment in Victoria, Australia. J Dent Educ. 2009; 73(3): 416-25.
- 23. Bender DJ. Patient preference for a racially or gender-concordant student dentist. J Dent Educ. 2007; 71(6): 726-45.