

The adaptation of probation period of employment on the Aboriginal nursing graduates in Taiwan

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KEY WORDS

aborigines, employment, new graduates, nursing
education, adaptation

ABSTRACT

Objective

The purpose of this study was to explore the adaptation of probation period of employment on Taiwanese aboriginal nursing graduates in health care institutions.

Design

A cross-sectional, descriptive design using a questionnaire was employed.

Setting

The setting for the study was an institute of technology in Taiwan offering five-year, two-year, four-year and graduate vocational nursing program.

Subjects

Taiwanese aboriginal nursing student graduates (n=145) were recruited for the study.

Results

Results of this study showed out of 21 items in clinical familiarity, only one item 'realised organisation culture' score was fewer than three (out of four). Most graduates felt confident in their job after the three month probation period. All aboriginal nursing graduates felt certain levels of influence in health, leisure activities, social activities, appetite, and sleep. They also expressed a delay of thirty minutes to up to four hours, in completing their scheduled shift. When facing difficulties in their work, they were willing to actively search for solutions. Talking to someone or partaking in leisure activities were two major methods of coping with stress for these graduates.

Conclusion

The results of this study show that the impression of nurse educators and clinical managers that aboriginal nursing students are less adapted in clinical settings than their non-aboriginal peers may be unfounded.

INTRODUCTION

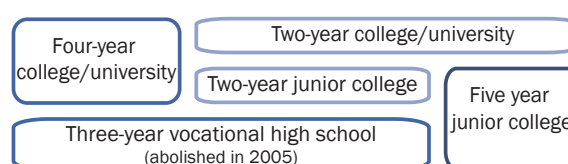
Traditionally, Taiwanese aborigines were a minority, were isolated, and were self-sufficient. Over the past few hundred years, the aboriginal Taiwanese population encountered waves of colonial domination, which resulted in the breaking down of their economic, cultural, and social life. Followed by economic development and lack of concern about aborigines' daily life from Taiwan's academic communities, aborigines had difficulty in obtaining employment (Chi 2005). Therefore, the unemployment of aborigines became an important issue to the government of Taiwan. According to the Council of Indigenous Peoples, Executive Yuan, R.O.C., the unemployment rate for aborigines was 5.76%, which was higher than non-aborigines 4.41% (2004). The education level of aborigines attending associate degree programs or above was 12% compared to non-aborigines at 27%. The aboriginal people comprise approximately 2% of the total population in Taiwan.

Due to long term passive interaction with an external environment, mal-adaptation, and lack of future plans, aboriginal students felt frustrated with their self-integration and self-development. There was less desire and willingness to learn. There was lower academic achievement, which led to a higher dropout rate, lower advancement to higher education, lower adaptation ability, and lower competition ability. This weakness was substantial in forming a vicious circle of becoming a disadvantaged minority.

In view of aborigines as a disadvantaged minority, the Ministry of Education, R.O.C. authorised a private nursing college for females only to undertake a study on female aboriginal adolescent education in order to promote their education level and employability. Since 1994, this focused aboriginal school has held a special entrance examination independently and recruited 100 to 400 female aboriginal students from various remote areas for a five-year junior nursing program. All tuition fees, miscellaneous fees, and living expenses were funded by the chairman of the school.

Hospital nursing managers reported aboriginal nursing graduates had difficulty in clinical performance and their turnover rate was higher than non-aboriginal nursing graduates. In order to retain these aboriginal nursing graduates and avoid educational resource waste, it is important to have a better understanding about these aboriginal nursing students adaptation ability during their first three months of employment.

Figure 1: Technological and vocational system in Taiwan



LITERATURE REVIEW

Nursing education is often described as idealistic. When a new graduate enters a health care institution, he or she, is faced with a situation in which the idealised role is in conflict with the working role of professional nurses. The new graduate experiences frustration when unable to fulfil personal and organisational practice expectations. The result is, 'reality shock'! Hospital accreditation statistics from the Department of Health in Taiwan revealed that the average turnover rate of nurses in Taiwan was 15%. Some hospitals' turnover rates were as high as 40% (Department of Health 1992). There have been no further statistics released by the Taiwanese government since 1992. The reasons for nurses leaving the workforce were work pressure, mal-adaptation, being unable to work night shift, and changing shifts too often (Chen et al 2006; Chen et al 2005; Chen et al 2000; Wang 1997; Yin 1991). There were few studies on recruitment and retention of minority nursing students and none about their employment adaptation (Abdur-Rahman and Gaines 1999; Campbell and Davis 1996; Fletcher et al 2003; McManemy 2002; Young et al 1994). Therefore, it is important to understand aboriginal nursing graduates' employment status.

Learning Attitude of Aboriginal Students

Poor academic performance, especially by Taiwanese aboriginal students, is often attributed to the lack of a mainstream cultural experience or poor socioeconomic status. Aboriginal students had a more apparent spirit of adventure and curiosity, but were weak in imagination (Hu and Lu 2005). According to Liao's study (1999), only one-tenth of aboriginal nursing students handled schoolwork with ease. The other nine-tenths of aboriginal nursing students felt different levels of stress from schoolwork. Even though the adaptation ability of life in aboriginal students was higher than non-aboriginal students, they had poorer study habits than non-aboriginal students and lacked motivation to learn (Hsu and Yang 2009; Lee 1999). Lack of confidence and learning difficulties were other issues for aboriginal students (Chi 2000; Wu 1994).

Due to cultural differences, language obstacles, and different thinking processes, learning became more difficult among aborigines (Tsai 1996). They are more active and like dynamic activities. So it was difficult for them to sit down and study. They had less motivation or even no interest in studying (Huang 2000). Even though aboriginal students' performance was poorer than non-aboriginal students, their intelligence was not less. The difference was in their thinking process (Lee 1999). Therefore, it is important for teachers to know aboriginal students' characteristics and to design different teaching methods for these students. There were some successful cases. According to Yang's study (2001), though the educational experience of five female aboriginal students in Sunrise Teacher's College had suffered racial discrimination from teachers and peer groups in schools, positive school achievement, and family support provided them the power to continue their study. School achievement motivated their learning and self-confidence.

Adaptation Ability of Aboriginal Students

When aboriginal adolescents who lived family life in a tribe enter into an educational system led by ordinary Chinese, they endured the pressure of combining two different cultures. Under a different value system, they had to adjust their learning attitudes, thinking processes, and behaviours in order to adapt the role

expectations from mainstream culture (Huang 2000). Due to differences in life style and background, aboriginal students, as minorities, felt pressure when facing non-aboriginal students and teachers (Hong 2000).

In order to assess the differences of psychiatric symptoms and unhealthy life styles between aboriginal and non-aboriginal adolescents, Li and Chang (1999) surveyed 27 classes of high school students from nine high schools in Eastern Taiwan. The results revealed that psychiatric symptoms were more common among non-aboriginal students, with depressive-anxiety being the most prominent symptom. Daily life stress was the major issue. Unhealthy behaviours were more common in aborigines such as smoking, betel nut chewing, and consumption of wine. These were also influencing factors for aboriginal students' adaptation to mainstream culture. Therefore, different interventions should be used for adolescents of different ethnic groups. Helping non-aboriginal adolescents cope with stress and preventing an unhealthy lifestyle among aboriginal adolescents should be considered equally important.

Even though aboriginal students had better life adaptation abilities than non-aboriginal students, they lacked good reading habits and had poor motivation to learn. They were influenced by peers more easily, reacted more emotionally, and were much quicker to behave irrationally. There were no significant differences in interpersonal relationships and learning adaptations between aboriginal students and non-aboriginal students (Lee 1999). When getting along with non-aboriginal students, these aboriginal students showed insufficient self-confidence. Only one tenth of aboriginal college students could manage schoolwork with ease and the other nine tenths felt different degrees of pressure (Liao et al 1999).

Clinical Performance of Aboriginal Nursing Students

The Chen, Shih and Yu's (2000) study showed that aboriginal nursing students' self-evaluation was lower than non-aboriginal nursing students' before

the clinical preceptorship program, but was higher than non-aboriginal nursing students in nursing care abilities after preceptorship. To these aboriginal nursing students, a good teacher's guidance and assistance could stimulate self-growth, learning ability, and establish confidence. In addition, if encouraged by clinical instructors in raising questions and inquiring about related references, aboriginal nursing students could establish self-confidence, eliminate a sense of inferiority, and promote growth of professional knowledge.

According to Sieh's (1991) study, there was a higher tendency for interpersonal relationships rather than work in aboriginal culture. Huang (2000) revealed that aboriginal students valued the harmony of interpersonal relationship and there was a positive correlation of relationships with their peers and teachers. This coincided with Chen and Chou's (2001) study, which showed that aboriginal nursing students' interpersonal skill, industriousness, and stamina, were better than non-aboriginal students during internship in the hospital. In addition, they had less observation ability and less creativity in working, but better open-mindedness in learning, better communication skills, and higher industriousness and patience. The learning, adaptation, and clinical performance of aboriginal students during school would have an influence on their work performance after graduation. According to Wei (2000), aborigines' traditional faith, behaviour, and ecological dispersion were influenced by rapid social change in Taiwan, which led to mal-adaptation and unemployment in aborigines. This needed attention.

According to data from the Department of Health, Executive Yuan (2006) reported that females aged 15 to 24 have the highest unemployment rate in Taiwan. From the Council of Indigenous People, Executive Yuan reported that the major social issues among aboriginal people were education, poorly established aboriginal professional training, social welfare, and a higher unemployment rate than non-aborigines (Council of Indigenous Peoples 2007). Some of the reasons for the higher unemployment rate were lack of opportunity for employment, a lower education level and professional skills, poor adaptation ability,

lower pay due to racial discrimination, rejection from foreign labours, difficult adjustment to work habits, different life habits, no show on Monday, different thinking processes, poor writing skills and poor vocabulary. (Chen et al 1999; Guo 1999; Lin 2002; Tian 2002; Wei 2000). Therefore, the employment of aboriginal females aged 15 to 24 should be given serious consideration.

There were many research studies focusing on academic achievement and life adaptation of aboriginal students in Taiwan, but there is no research regarding the employment adaptation of aboriginal students after graduation. Yet the experiences of employment adaptation should be of concern. Government and related enterprises should also pay attention to aboriginal people's employment adaptation and psychological support, whilst fostering and promoting employment opportunities.

RESEARCH METHOD

A cross-sectional, descriptive design using a questionnaire was employed. After gaining ethical approval from the researcher's school, samples were collected from aboriginal nursing students who graduated from a five-year junior nursing college in the northern part of Taiwan. A constructed adaptation ability questionnaire with 29 questions, including clinical familiarity (1-21), influence on the quality of rest and life (22-26), adaptation after three months of work (27-28), and the last question for methods of coping with stress was developed. Expert validation from four nursing experts (a nursing professor, an associate nursing professor, and two clinical nursing managers) was 98.60%. For the 28 items of the scale, an alpha of 0.92 was calculated, indicating acceptable value for a well-developed instrument.

The questionnaire was based on a 4-point Likert scale: strongly agreed (4), agreed (3), disagreed (2), strongly disagreed (1), and was used after three months of orientation in the health care institutions. Data was analysed by using the Statistical Package for Social Sciences (SPSS) version 15.0 software for Windows for frequency, percentage, mean, and standard deviation.

FINDINGS

A form was mailed to 238 aboriginal nursing graduates by using addresses obtained from the aboriginal educational centre, requesting personal data and current employment status. After one month, only 46 (19.33%) were returned in the mail. A second attempt was made to contact the graduates by telephone and 145 (60.92%) were obtained. The employment status of the graduates is outlined in table 1. Of the respondent 15.86% were employed in nursing related fields. These include the areas of child-care institutions, cosmetic companies, pharmaceutical factories, administrative work in health care institutions, and health clubs. A total of 7.59% of respondents were employed in non-nursing fields. These include religious work, pubs, restaurants and factories.

Table 1: Employment status on aboriginal nursing students n=145

Place of work	Frequency	Percent	Rank
1. Clinical nursing	56	38.62	1
2. Related nursing field	23	15.86	3
3. Higher education	39	26.90	2
4. Non-nursing	11	7.59	4
5. Cram school for higher education	7	4.83	5
6. Unemployment	6	4.14	6
7. Married and stayed home	3	2.06	7
Total	145	100.00	

Since the research was focused on clinical nursing practice in health care institutions, samples were narrowed down to 56 aboriginal nursing graduates who were actually practicing in clinical nursing. After their assurance they would mail back the questionnaire, it was mailed out along with a consent form and a gift. A follow-up telephone call was made. The respondent place of work is shown in table 2. According to the Department of Health in Taiwan, hospital levels can be classified as a medical centre (over 500 acute beds), a district hospital (over 250 acute beds), or a regional hospital (over 20 acute beds).

Table 2: Place of work in health care institutions n=56

Place of work	Frequency	Percent	Rank
1. Public Health	1	1.79	5
2. Clinics	9	16.07	3
3. Regional Hospital	20	35.71	2
4. District Hospital	24	42.86	1
5. Medical Centre	2	3.57	4
Total	56	100.00	

Table 3: Clinical familiarity N=56

Item	Mean	SD	Rank
1. Realised organisational culture	2.82	0.94	1*
2. Realised nursing departmental goal	3.21	0.93	3*
3. Familiar with co-worker	3.91	0.29	1*
4. Realised co-worker's duties	3.89	0.31	2*
5. Realised duties and executed accurately	3.82	0.43	
6. Realised unit routine work and executed accurately	3.82	0.39	
7. Realised diseases of the unit	3.79	0.46	
8. Operated nursing skills accurately	3.55	0.63	
9. Familiar with examination and consultation process	3.52	0.66	4*
10. Co-operated with and executed consultation process accurately	3.57	0.63	5*
11. Operated admission/discharge/transfer of patients accurately	3.86	0.48	
12. Operated medical equipment accurately	3.57	0.71	5*
13. Adequate intervention while patient's condition changed	3.09	0.58	2*
14. Familiar with unit environment	3.91	0.29	1*
15. Administered order accurately	3.91	0.35	1*
16. Filled out related medical records accurately	3.88	0.38	
17. Realised medication process	3.75	0.61	
18. Realised unit common medication mechanism and side effects	3.86	0.44	
19. Administered medication accurately	3.86	0.44	
20. Operated computer accurately	3.75	0.51	
21. Good communication with medical team	3.91	0.29	1*

Note: * the five highest scores * the five lowest scores

The first part of the questionnaire regarding clinical familiarity is shown in table 3. The top five highest scores were: familiar with co-worker, familiar with unit environment, administered orders accurately, good communication with medical team, and realisation of co-worker's duties. The five lowest scores were: realisation of organisational culture, adequate intervention while patient's condition changed, realised nursing departmental goal, familiar with examination and consultation process, co-operated with and executed consultation process accurately, and operated medical equipment accurately. The influence of the quality of rest and life from highest to lowest areas were: health, leisure activities, social activities, appetite, and sleep quality (table 4). Adaptation after three months of work showed that graduates could actively search for solutions when facing difficulty working (mean = 2.82) as well as finishing work on time (mean = 2.59). Methods of coping with stress are shown on table 5. Almost all of the graduates (98.21%) could find ways to cope with stress during a three-month probation period.

Table 4: Influence quality of rest and life n=56

Factors	Mean	SD	Rank
1. Health	3.34	0.92	1
2. Appetite	2.63	1.24	4
3. Sleep quality	2.54	1.28	5
4. Social activities	2.91	1.07	3
5. Leisure activities	2.96	1.08	2

Note: strongly agreed (4), agreed (3), disagreed (2), strongly disagreed (1)

Table 5: Methods of coping stress n=56

Methods	Frequency	Percent	Rank
1. Leisure activities	2	3.57	4
2. Talked to somebody	28	50.00	1
3. Leisure activities and talked to somebody	21	37.50	2
4. Other methods	4	7.14	3
5. No method	1	1.79	5
Total	56	100.00	

DISCUSSION

Profile of Employment Status

There are several reasons for a high percentage (31.73%) of aboriginal nursing graduates pursuing

higher education directly following their graduation from the five-year nursing college program. These include the establishment of more two-year bachelor nursing schools, the preferential policies for aboriginal students entering higher education through an entrance examination, more medical centres requiring a bachelor degree and higher pay for bachelor degree positions. Graduates in related nursing fields such as child care institutions, cosmetic companies, pharmaceutical factories, administrative work in health care institutions, and health clubs were not interested in clinical nursing practice, but preferred to stay in related and familiar fields. Reasons for working in non-nursing fields were, either no interest in nursing, looking for another job, or still waiting for a nursing job. The majority of graduates (82.14%) working in an acute hospital setting liked to put theory into practice, experience real nursing, as well as prepare themselves for career advancement.

Clinical Adaptation Ability

Out of 21 items regarding clinical familiarity, only one item, 'realised organisation culture', scored under three. Most graduates felt confident in their job after a three month probation period. They handled their work well. They expressed that they worked hard at not being labelled as aborigines. They did not want their staff and nurse manager to make judgments about them. Some of them even expressed that they performed better than some of the non-aboriginal nursing staff on the unit. One of the top five highest scores showed that aboriginal nursing graduates had good communication and social skills. This was consistent with previous studies (Chen and Chou 2001; Huang 2000; Sieh 1991). They valued the harmony of interpersonal relationship. The first of the five lowest scores, they expressed organisational culture and nursing departmental goals had no direct influence on work compared to clinical practice. They did not pay much attention to themselves during their first three months of employment. They felt three months was not long enough for them to react to emergency situations in a timely manner. They needed more time and opportunity to practice with complicated equipment and consultation processes.

Influence of Quality of Rest and Life Due to Work

The aboriginal nursing graduates felt certain levels of influence in health, leisure activities, social activities, appetite, and sleep. In Taiwan, nurses rotate shifts on a monthly basis, they need to adjust their body clock every month. They may privately change shifts with other nursing staff. Working rotating shifts every month also made them have a more abnormal life style than others. Caring for patients is the main part of a nurse's job, this puts graduates under much more pressure than those working in other roles. Reasons for leaving the nursing workforce such as work pressure, three shifts, mal-adaptation, and abnormal life style (Chen et al 2006; Chen et al 2005; Chen et al 2000; Wang 1997; Yin 1991), the tendency of leaving nursing jobs or retaining them should be seriously considered.

Adaptation after Three Months of Work and Methods of Coping with Stress

All of the aboriginal nursing graduates expressed that they worked from thirty minutes to up to four hours in addition to their scheduled shift. In the majority of hospitals no overtime was paid for this work and instead time in lieu may have been offered. This needed to be verified by the unit head nurse. When facing difficulty in work, the nurses knew and were willing to actively search for solutions. Talking to someone or engaging in leisure activities were two major methods of coping with stress for these new graduates. Only one did not use any coping methods and should be observed.

LIMITATIONS

It was very difficult to contact students following graduation, especially aboriginal students. There were many obstacles to overcome such as disconnected phones (many aborigines were poor and could not afford to pay their telephone bill), frequently changed phone numbers, written and verbal language barriers (elder members at home were mostly illiterate people and only spoke the native aboriginal language), and family members having difficulty in keeping track of their children. There needs to be a better mechanism to follow up on students after their graduation.

CONCLUSION

Findings from this study provide better understanding on the adaptation of probation period of employment on these aboriginal nursing graduates in health care institution. The results of this study show that the impression of nurse educators and clinical managers that aboriginal nursing students are less adapted in clinical settings than their non-aboriginal peers may be unfounded.

Further study should be done in relation to the loss of new graduates from the nursing profession directly following their graduation and reasons for leaving nursing fields after graduation.

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