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**THE MARKET DEMAND AND SUPPLY OF FILIPINO NURSES
FROM 1998 TO 2002: A TREND ANALYSIS**

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ABSTRACT

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STATEMENT OF THE PROBLEM:

This study determined the market demand and supply of Filipino nurses from 1998 to 2002.

The study sought the answers to the following specific problems:

1. What is the population statistics from 1998 to 2002 of :
 - 1.1 nursing graduates; and
 - 1.2 successful examinees in the Nursing Licensure Examination
 - 1.2.1 local , and
 - 1.2.2 international?
2. What is the market demand for nurses based on the population statistics from 1998 to 2002?
 - 2.1 How is the local / international market demand satisfied?



3. What is the employment rate of Filipino nurses from 1998 to 2002 based on population statistics?

3.1 How is the local / foreign employment satisfied in terms of deployment and preferred country of destination?

4. What is the trend of market demand and supply of nursing graduates in the Philippines in terms of population statistics of graduates and market demand in the next five years?

5. Based on the findings of the study, what recommendations could be proposed to the colleges of nursing for the marketability of their graduates considering the law of supply and demand?

SCOPE AND COVERAGE:

✓ The study ventured to determine the market demand and supply of Filipino nurses from 1998 to 2002. The examination of pertinent records and documents from various institutions were made to trace and forecast the trend of the demand and supply of Filipino nurses.

For specificity, the study was delimited to year 1998 to 2002. To maintain the confidentiality of the documents, the researcher decided to utilize mainly statistical information.

METHODOLOGY:

✓ The study utilized a descriptive documentary quantitative research design. ✓ The 34,422 Bachelor of Science in Nursing graduates, 29,359 successful examinees in the local nursing licensure examination and 7,649



successful examinees in the international licensure examination were used as samples in the study. Likewise, 6,321 nurses who were employed in the local market and the 43,734 deployed nurses were included.

Documentary analysis of available records and key consultant interview using a self-structured open-ended questionnaire were used to obtain the descriptive information. The data were statistically treated using percentage, law of supply and demand formula, and the quadratic and simple linear regression.

MAJOR FINDINGS:

In the course of the study the following were drawn and presented:

1. Population statistics in terms of the following:

1.1 Nursing graduates from 1998 to 2002. Academic year 1997 to 1998 had the greatest number of nursing graduates, 11,097 or 32 percent of the total number of graduates (34,422).

1.2 Successful examinees in the local nursing licensure examination from 1998 to 2002. Overall number of board passers was 29,359 or 59.29 percent of the total number of examinees (57,242).

1.3 Successful examinees in the international nursing licensure examination (NCLEX - RN) from 1998 to 2002. Overall number of board passers was 7,649 or 42.60 percent of the total number of examinees (17,953).

2. The market demand for nurses based from population statistics:



2.1. Market demand in the Philippines from 1998 to 2002. The highest number of demand was in 2002, (27,501) and lowest in 1999, (309).

2.2 Market demand in Singapore from 1998 to 2002. The highest number of demand was in 1999, (472) and lowest in 2001, (159).

2.3 Market demand in the United States of America from 1998 to 2002. The highest number of demand was in 2002, (135,586) and lowest in 1998, (72,795).

2.4 Market demand in government institutions of Saudi Arabia from 1998 to 2002. The highest number of demand was in 2001, (1,007) and lowest in 1999, (827).

2.5 The market demand for nurses in the Philippines versus the nursing graduates from 1998 to 2002. Overall number of BSN graduates in five years (34,422), higher than the total number of local demand for nurses (29,731), with a ratio of 1 : 1.

2.6 The market demand for nurses in Singapore versus the nursing graduates from 1998 to 2002. Overall number of BSN graduates in five years (34,422) higher than 1,532, the total number of demand for nurses, at a ratio of 1 : 22.

2.7 The market demand for nurses in the United States of America versus the nursing graduates from 1998 to 2002. Overall number of BSN graduates in five years (34,422), lower than 499,158 the total number of demand for nurses, at a ratio of 1 : 0.



2.8 The market demand for nurses in government institutions of Saudi Arabia versus the nursing graduates from 1998 to 2002. Overall number of BSN graduates in five years was (34,422), higher than 4,413, the total number of demand for nurses, at a ratio of 1: 8.

2.9 The market demand for nurses in the Philippines versus the successful examinees in the local nursing licensure examination from 1998 to 2002. Overall number of successful examinees in the local nursing licensure examination in five years was (29,359), slightly lower than 29,729, the total number of demand for nurses, at a ratio of 1 : 1.

2.10 The market demand for nurses in Singapore versus the successful examinees in the local nursing licensure examination from 1998 to 2002. Overall number of successful examinees in the local nursing licensure examination in five years was (29,359), higher than 1,532, the total number of demand for nurses, at a ratio of 1 : 19.

2.11 The market demand for nurses in the United States of America versus the successful examinees in the NCLEX-RN from 1998 to 2002 . Overall number of successful examinees in the NCLEX - RN examination in five years was (7,649), lower than 499,158, the total number of demand for nurses, at a ratio of 1 :0.

2.12 The market demand for nurses in government institutions of Saudi Arabia versus the successful examinees in the local nursing licensure examination from 1998 to 2002. Overall number of successful examinees in



the local nursing licensure examination in five years was (29,359), higher than 4,413, the total number of demand for nurses, at a ratio of 1 : 7.

3. The employment of Filipino nurses based on population statistics:

3.1 Employment rate of nurses in the Philippines from 1998 to 2002.

Overall number of employed nurses in five years was 6,321 or 21.26 percent in terms of employment rate.

3.2 Employment rate of nurses in Singapore from 1998 to 2002.

Overall number of employed Filipino nurses in five years was 1,420 or 92.7 percent in terms of employment rate.

3.3 Employment rate of nurses in the United States of America from 1998 to 2002. Overall number of employed Filipino nurses in five years was 771 or .15 percent in terms of employment rate.

3.4 Employment rate of nurses in government institutions of Saudi Arabia from 1998 to 2002. Overall number of employed Filipino nurses in five years was 4,413 or 100 percent in terms of employment rate.

3.5 Employed nurses versus the market demand in the Philippines from 1998 to 2002. Overall number of nurses employed in five years was (6,321), lower than 29,729, the overall number of local demand, at a ratio of 1 : 0.

3.6 Employed nurses versus the market demand in Singapore from 1998 to 2002. Overall number of Filipino nurses employed in five years was



(1,420), slightly lower than 1,532, the overall number of demand, at a ratio of 1: 1.

3.7 Employed nurses versus the market demand in the United States of America from 1998 to 2002. Overall number of Filipino nurses employed in five years was (771), lower than 499,158, the overall number of demand, at a ratio of 1 : 0.

3.8 Employed nurses versus the market demand in government institutions of Saudi Arabia from 1998 to 2002. Overall number of Filipino nurses employed in five years was (4,413), equal to 4,413, the overall number of demand, at a ratio of 1 : 1.

3.9 Deployed Filipino nurses in top leading countries for the year 1998. Saudi Arabia had the greatest number of employed Filipino nurses (3,473), or 75.5 percent of the total number of deployment (4,591), followed by United Arab Emirates, Singapore, Kuwait, and Libya.

3.10 Deployed Filipino nurses in top leading countries for the year 1999. Saudi Arabia had the greatest number of employed Filipino nurses (3,567) or 66 percent of the total number of deployment (5,413) followed by United Kingdom, United Arab Emirates, Singapore, and Oman.

3.11 Deployed Filipino nurses in top leading countries for the year 2000. Saudi Arabia had the greatest number of employed Filipino nurses (3,888) or 50 percent of the total number of deployment (7,683), followed by United Kingdom, United Arab Emirates, Singapore, and Kuwait.



3.12 Deployed Filipino nurses in top leading countries for the year 2001. United Kingdom had the greatest number of employed Filipino nurses (5,383) or 40 percent of the total number of deployment (13,536) followed by Saudi Arabia, Ireland, Singapore, and United States.

3.13 Deployed Filipino nurses in top leading countries for the year 2002. Saudi Arabia had the greatest number of employed Filipino nurses (5,704) or 48 percent of the total number of deployment (11,911), followed by United Kingdom, Ireland, Libya, and United Arab Emirates.

4. The trend of BSN graduates and market demand in the next five years :

4.1 Trend of BSN graduates in 2003 to 2007. A regression equation of $Y = 3176.192 + 8120.164 \frac{1}{X}$ and a multiple correlation of 0.963 indicated significance. The projected value in 2003 is 4,529; in 2004, 4,336; in 2005, 4,191; in 2006, 4,078; and in 2007, 3,988.

4.2 Trend of market demand for nurses in the Philippines in 2003 to 2007. A regression equation of $Y = 723.347 X^2$ and a multiple correlation of 0.822 indicated significance. The projected value in 2003 is 26,040; in 2004, 35,444; in 2005, 46,294; in 2006, 58,591; and in 2007, 72,335.

4.3 Trend of market demand for nurses in Singapore in 2003 to 2007. A regression equation of $Y = 73.618 X$ and a multiple correlation of 0.920 indicated significance. The projected value in 2003 is 442; in 2004, 515; in 2005, 589; in 2006, 663 and in 2007, 736.



4.4 Trend of market demand for nurses in the United States of America in 2003 to 2007. A regression equation of $Y = 70594.335 + 2657.933 X^2$ and a multiple correlation of 0.998 indicated significance. The projected value in 2003 is 166,280; in 2004, 200,833; in 2005, 240,702; in 2006, 285,887; and in 2007, 336,388.

4.5 Trend of market demand for nurses in the government institutions of Saudi Arabia in 2003 to 2007. A regression equation of $Y = 240.164 X$ and a multiple correlation of 0.894 indicated significance. The projected value in 2003 is 1441; in 2004, 1681; in 2005, 1921; in 2006, 2161; and in 2007, 2402.

5. Recommendations to the colleges of nursing for the marketability of their graduates.

Maintenance of high admission standards; continuous evaluation of nursing program; hiring of qualified dean and faculty; and emphasis on accreditation of nursing schools to produce quality nurses.

Conclusions

Based on a careful analysis of the findings, the following conclusions were drawn:

1. There is an increasing number of successful examinees in the NCLEX-RN examination and inversely in the number of BSN graduates and successful examinees in the local nursing licensure examination;



2. The number of BSN graduates has satisfied the local and international market except in the United States, likewise the successful examinees in the local nursing licensure examination had satisfied the market demand in the Philippines, Singapore and Saudi Arabia. However, in the NCLEX-RN the demand was not satisfied;

3. The employment of Filipino nurses in Singapore and Saudi Arabia has satisfied the demand of these countries for nurses while deficient in the Philippines and the United States; and

4. There is an increasing number of demand for nurses in the Philippines, Singapore, United States of America and Saudi Arabia which is the inverse in the number of BSN graduates for the next five years.

Recommendations

On the account of the findings and conclusions of the study, the following are recommended:

1. Universities and colleges offering nursing courses should enhance the academic preparation of nursing students to meet the licensure criterion for passing the local and international examination;

2. Continuous follow-up and monitoring of academic delivery of instruction of schools offering nursing courses should be fostered to sustain the national and international passing rate of BSN graduates;



3. Close coordination among different sectors like POEA, DOLE and CHED, as regards maintaining the balance between the number of graduates and the demand in the local and international market;

4. Delivery of instruction should be globally competitive so that BSN graduates of the Philippines will have an equal standard in the international market;

5. Approving the opening of new schools should be based on how the schools meet the high standards of nursing education to ensure passing of the graduates in the licensure examinations;

6. Various sectors such as DOLE , POEA and CHED should engage in forecasting and trend analysis studies to have a baseline information for the size of changes that will occur in terms of the number of graduates and demand for nurses; and

7. A follow-up study involving a wider coverage to effectively monitor the supply and demand of nurses is recommended.



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