NURSING MANPOWER IN



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الجَرُهُورِيِّ اللَّبِ مَانِيَّ اللَّبِ مَانِيَّ مَا الْبَرِيَّ اللَّهِ الْمَارِّةِ مِنْ السَّمَةِ الْمَارِّةِ مَنْ السَّمَةِ المَارِّةِ مَنْ السَّمَةِ الْمَارِّةِ مِنْ السَّمَةِ الْمَارِيِّ مِنْ السَّمَةِ الْمُعَامِّ السَّمَةِ الْمُعَامِّ السَّمَةِ الْمُعَامِّ الْمُعَامِّ الْمُعَامِّ الْمُعَامِّ الْمُعَامِّ السَّمَةِ الْمُعَامِّ الْمُعَامِّ الْمُعَامِّ الْمُعَامِّ الْمُعَامِّ الْمُعَامِلِيِّ الْمُعِلِيِّ الْمُعَامِلِيِّ الْمُعَامِلِيِّ الْمُعَامِلِيِّ الْمُعَامِلِيِّ الْمُعَامِلِيِّ الْمُعِلِي الْمُعَامِلِيِّ الْمُعَامِلْمِلْمِلْمِي الْمُعِلِي الْمُعِلِّي الْمُعِلِّي الْمُعَامِلِيِّ الْمُعِلِيِّ الْمُعَامِلِيِّ الْمُعِلِي الْمُعِلِيِّ الْمُعِلِيِيِّ الْمُعِلِيِّ الْمُعِلِيِّ الْمُعِلِيِّ الْمُعِلِي الْمُعِلِيِّ الْمُعِلِي الْمُعِلِي الْمُعِلِي الْمُعِلِيِّ الْمُعِلِي الْمُعِلِي الْمُعِلِيِّ الْمُعِلِي الْمُعِلِي الْمُعِلِي الْمُعِلِي الْمُعِلْمِي الْمُعِلِي الْمُعِلِي الْمُعِلْمِي الْمُعِلِي الْمُعِلِيِيِي الْمُعِلْمِي الْمُعِلِي الْمُعِلِي الْمُعِلِيِي الْمُعِلِي الْمُعِلِيِيِي

Increasing attention has been given to health manpower studies in developing countries during the past few years. This paper concerns itself with the nursing manpower situation as it stood at the end of 1968 in Lebanon – a Middle Eastern country with a population slightly less than $2\frac{1}{2}$ millions and an area of about $10,500 \text{ km}^2$.

This study covers only the professional nursing personnel who graduated from nursing schools officially recognized by the Lebanese government. At the end of 1968, eight such schools were operating in the country, as outlined in table I. The number of graduates from schools of nursing located outside Lebanon is very small and most of them are engaged in teaching.

The categories of practical nurses, auxiliary nurses, and nursing aides are not covered in this study in view of the tremendous confusion existing with respect to nomenclature, definition and status. Under this category are included orderlies who have had no training whatsoever up to 'practical' nurses who have had 'on-the-job training' or who have even followed regular training programs for a few months and up to a year. In view of the unusual complexity of the position with regard to these 'non-professional' groups in the present circumstances, it is planned to explore their status in a separate study.

According to recent legislation, the practice of the nursing profession entails a minimum of 11 years of general education followed by three or more years of nursing education in a recognized school of

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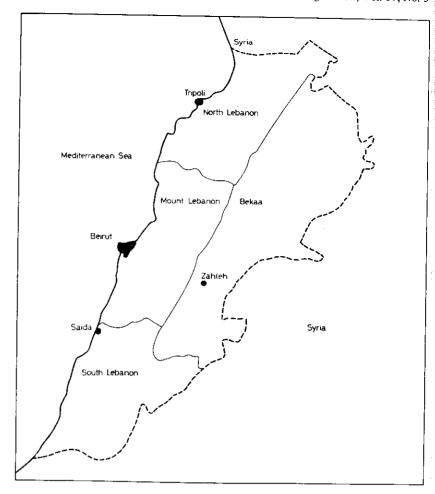


Fig. 1. Map of Lebanon.

nursing, and subsequent passing of a government examination referred to as colloquium. At the time of registration, the nurse should have reached 20 years of age.

Under the same law, the approval of Schools of Nursing and Centers for Nursing Assistants is the joint responsibility of the Ministries of Health and Education. The by-laws for establishing a Lebanese Nurses Association have recently been submitted to the legislature for approval.

Table I. Professional nursing schools operating in Lebanon at the end of 1968

me and location, of school	Year of establishment	Language of instruction
Nursing School of the American University of Beirut	1905	English
Nursing School of the Saint-Joseph University, Beirut	1930	French
Red Cross Nursing School, Beirut	1946	French
National (Makassed) School of Nursing, Beirut	1946	Arabic
School of Nursing, Lebanon Hospital for Mental and Nervous Disorders, Beirut suburbs	1948	English
Christian Medical Center Nursing School, Beirut	1949	English
League of Social Assistants Nursing School, Tripoli	1957	Arabic
Red Cross Nursing School, Tripoli	1961	French
National Evangelical Nursing ¹ School (Kennedy Memorial Hospital), Tripoli	1935	English
	Nursing School of the American University of Beirut Nursing School of the Saint-Joseph University, Beirut Red Cross Nursing School, Beirut National (Makassed) School of Nursing, Beirut School of Nursing, Lebanon Hospital for Mental and Nervous Disorders, Beirut suburbs Christian Medical Center Nursing School, Beirut League of Social Assistants Nursing School, Tripoli Red Cross Nursing School, Tripoli National Evangelical Nursing ¹ School	Nursing School of the American University of Beirut Nursing School of the Saint-Joseph University, Beirut Red Cross Nursing School, Beirut National (Makassed) School of Nursing, Beirut School of Nursing, Lebanon Hospital for Mental and Nervous Disorders, Beirut suburbs Christian Medical Center Nursing School, Beirut League of Social Assistants Nursing School, Tripoli Red Cross Nursing School, Tripoli National Evangelical Nursing¹ School 1935

Methodology

During the planning stage and in a meeting held at the American University of Beirut in June 1969, the Directors of the Schools of Nursing listed in table I were introduced to the study. The meeting was followed by repeated visits to the individual Nursing Schools to review pertinent records and carry out further discussions with the respective directors and staff. In addition, close contacts were made with the Nursing Section of the Ministry of Health to clarify a number of points relating to the registration of nurses.

Findings

Table II shows registered nurses by nationality and geographical distribution. It is noted that the number of registered professional nurses in Lebanon was 1,365 at the end of 1968. Of these, 84.5 % are Lebanese, 6.5 % Syrian, 4.7 % Palestinian, and 1.2 % French. The

Table II. Registered nurses in Lebanon, December 1968, by nationality

Nationality (Country)	Beirut	Mount Lebanon	North Lebanon	South Lebanon	Bekaa	Unknows location in Leband	
Belgium	2	_					
France	8	1			•	_	2
Greece	1	_			1	7	17
Iran	1	_	_		_	2	3
Italy	3	_	_	_		4	5
Jordan	1		1	_	_	_	3
Lebanon	744	154	100	_ 48		-	2
Palestine	34	10	10	5	20	88	1154
Syria	63	7	9	3	-	5	64
Turkey	1	1	,	_	2	8	89
UAR	6	*		-	-	2	4
UK	2	2	_	Ţ		1	8
USA	2	2	_	_	_	2	6
USSR	1	_	1		* -		2
Other1	Ī	_	1			1	3
						1	3
Fotal	870	175	122	54	23	121	1365

I Includes Algeria, Colombia and Spain.

remaining small percentage is distributed among other nationalities as noted from table II.

About 63.7 % of registered nurses are located in Beirut, the capital city; 12.8 % in Mount Lebanon; 8.9 % in North Lebanon; 4 % in South Lebanon; and 1.7 % in the Beka'a governorate. Location in Lebanon is unknown with respect to 8.9 % of the registered nurses.

Age and Sex

Table III shows registered nurses by age and sex. It is noted that about 95.5 % of the total registered nurses in Lebanon are females, the remaining 4.5 % being males. A little more than one-third of male nurses work in Beirut and none work in the Beka'a governorate. More male nurses have been trained than can be concluded from the above figures. However, many of them migrate to work as nurses in neighbouring countries where the need for them is greater.

It is also noted that 38.5% of all nurses fall in the age group 'less-than-thirty years' thus representing the largest group.

Table III. Registered nurses in Lebanon, December 1968, by age and sex

Governorate	Ç3 yea		30- yea	–39 us	40- yea	-49 irs	50 yea	-59 us	60 yea	-69 urs	70 ove	and er	То	tal	
	M	F	M	F	M	F	M	F	M	F	М	F	М	F	Total
Beirut	18	349	3	343	1	90	_	48	_	- . 9		9	22	848	870
Mount Lebanon	7	40	10	73	2	28		6	_	4	_	5	19	156	175
North Lebanon	7	55	6	26	2	15	_	8		2	_	1	15	107	122
South Lebanon	1	23	1	17	_	6		4	_	2		_	2	52	54
Bekaa	_	11		7		2		3	_		_	_	_	23	23
Unknown	1	13	1	28	_	8	•	42	-	15		13	2	119	121
Total	34	491	21	494	5	149		111	_	32	_	28	60	1305	1365
	525		515		154	,	111	 [32		28		_		<u> </u>

Table IV. Registered nurses in Lebanon, December 1968, by year and school of graduation

School of Nursing	Before 1910	1910- 1919	1920 1929	1930- 1939	1940- 1949	1950 1 959	1960- 1968	Total
American University of Beirut (AUB)	2	10	32	33	32	46	78	233
Christian Medical Center (CMC)	_	_	=		-	18	23	41
Lebanese Hospital for Mental and Nervous Disorders	-	-	_			29	24	53
(Asforiyeh) League of Social Assistants, Tripoli			-	_	-	_	68	68
National Evangelical School,		-	_	4	27	47	24	102
Tripoli (Kennedy) National School of Nursing, Beirut (Makassed)	_	_	-	-	_	132	116	248
Red Cross, Beirut	-	-	-	-	11	107	94	212
Red Cross, Tripoli	-	-	_	_		_	20	20
Saint-Joseph, Beirut (FFM)	****	-	_	87	47	100	154	388
Total	2	10	32	124	117	479	601	1365

Table V. Registered Nurses in Lebanon, December 1968, by post-basic and other academic programs

Training Programs	Beirut	Mount Lebanon	North Lebanon	South Lebanon	Bekaa	Un- known	Tota
Anesthesia	19	2	1	1	2	1	26
Aviation Nursing	3			_	_		3
Dietetics	1	_		_	_		1
Eye, Ear, Nose, Throat	2			_		_	2
Midwifery	59	17	20	4	3	50	153
Occupational Therapy		4	_	_	_		4
Operating Room	9		1	1			11
Pediatrics	2		-	_	_		2
Psychiatric Nursing	_	4	1	_	_		5
Public Health Nursing	22	1	_	1	_		24
Bachelor of Science in Nursing Education	4	_	-	_	_		4
Master of Science	6		_	_	_		6
Pharmacy	1	_	_		-		1
Social Service	32	-	3				35
Total	160	28	26	7	5	51	277

School and Year of Graduation

Table IV lists registered nurses by school and year of graduation. The largest group (28.5%) graduated from the Nursing School of the Saint-Joseph University, and the second largest (18%) from the National (Makassed) School of Nursing. Next come the Nursing School of the American University of Beirut (17%); the Red Cross Nursing School in Beirut (7.4%); the League of Social Assistants' Nursing School in Tripoli (5%); the Nursing School of the Lebanese Hospital for Mental and Nervous Disorders (4%); The Christian Medical Center Nursing School (3%); and the Red Cross Nursing School in Tripoli (1.6%).

The above findings do not coincide with the number of nurses who graduated from the afore-mentioned nursing schools. For instance, the Nursing School of the American University of Beirut heads the list as far as the total number of graduates is concerned (827). However, the fact that a large proportion of students trained at this School came from countries other than Lebamon and returned

Table VI. Active and inactive registered nurses in Lebanon, December 1968, by age and marital status

	> 30	<30 years	30-3	9 years	40-4	19 years	30-39 years 40-49 years 50-59 years	ears	60-69 yc	ars	60-69 years 70 and over	Total		
	Marric	ed Single	Мапіе	d Single	Marric	ed Single	Married Si	ingle	Married Si	ngle	Married Single Married Single Married Single Married Single Married Single Married Single Trated	Marrie	Sinote	1040
										,			3 01110	Total
Active in Nursing Inactive in Nursing	5.4 5.4	390	54	238	50	55) 6	7	1	~	.3	107	706	813
Sime in the same	ì	4 0 1	122	89	59	20	35 50		14 15		8 17	336	216	552
Total	c													1
10141	8	436	209	306	79	7.5	44 67		14 18		8 20	443	011	1366
												1	177	1001
	525		515		154		111	•	3.)	•	96	1276		
	ĺ							•	1	•	0	1363		

home on completion of their studies, coupled with the fact that some Lebanese graduates migrated abroad, account for the relatively smaller group of graduates remaining in the country.

Post-Basic Training

Table V indicates registered nurses who have had post-basic and/or other academic education. About 20 % of all nurses have acquired further training in nursing or related fields. In this respect, midwifery, social service, anesthesia and public health have been attractive fields of study. Very few nurses (only six) are holders of Master of Science degree in nursing education or nursing service administration. Over 50 % of those who obtained further training are located in Beirut.

Table VII. Registered nurses in Lebanon, December 1968, by type of professional activity

Activity	Beirut	Mount Lebanon	North Lebanon	South Lebanon	Bekaa	Un- known	Total
Hospitals	376	92	47	12	10	-	537
Clinics and Health Centers	43	11	22	12	4	_	92
Medical Social Work	27	1	2	_	_		30
Private Duty	18	4	3	3	_	2	30
Nursing Education	24	1	2	1		_	28
Operating Room and CSR	20	-	2	1	_	_	23
Public Health Nursing and School Nurse	16	2	2	_	-	_	20
Anesthesia and Inhalation	12	1	1	1	2	**	17
Midwifery	8	1	5	_	_		14
Studying (Post-Basic)	8	_	1	_	_	_	9
Industrial Nurse	3	1	4	_	_		8
Nutrition	2		_	_	_	_	2
Occupational Therapy		1	_	_	_	_	1
Pharmacy	1	_	_	_	_	_	1
X-ray and Lab. Tech.	1		<u> </u>		_		1
Total Active	559	115	91	30	16	2	813
Inactive Nurses	311	60	31	24	7	119	552
Grand Total	870	175	122	54	23 "	121	1365

express their gratitude for the assistance received from all those who were consulted during the study, particularly the directors of the Nursing Schools listed in the paper.

References

1 Annual report of vital and health statistics for the year 1968: Ministry of Public Health, Republic of Lebanon.

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الجمهورية اللبنانية مَكتب وَذِيرُ الدَولة لشوَّ وِن الشَّمَية الإداريّة مَركز مِشاديْع وَدرَاسَات القطاع الْعَامُ

Pflegepersonal im Libanon

Die Autoren untersuchten die Lage des Pflegepersonals in Libanon, um zuverlässige Auskünfte über die registrierten Krankenschwestern und Krankenpfleger, ihr Geschlecht, Alter, Herkunftsland, ihre Ausbildung, Verteilung und die Art ihres Einsatzes zu erhalten. Unter den Ergebnissen verdient der akute Mangel an beruflichem Pflegepersonal auf dem Lande und der relativ starke Anteil an "unbeschäftigtem Personal" Beachtung.

Eine Zusammenarbeit von Regierung und freiwilligen Vermittlungsstellen sowie anderer verwandter Organisationen ist notwendig, um die Höhe des Berufsstandes zu verbessern.

Main-d'œuvre dans le domaine des soins infirmiers au Liban

La situation de la main-d'œuvre dans le domaine des soins infirmiers au Liban a été examinée dans le but d'obtenir des renseignements exacts en ce qui concerne les infirmières professionnelles immatriculées: leur âge, sexe, nationalité, école de formation, genre et répartition du travail.

Parmi les constatations particulièrement inquiétantes qui ont été faites, on trouve la pénurie aigue d'infirmières professionnelles dans le pays et la proportion relativement élevée "d'infirmières qui ne travaillent pas".

Des travaux d'approche par équipe entre le Gouvernement et des institutions bénévolés et autres organisations affiliées est indispensable pour améliorer le statut légal de la profession.

La mano de obra enfermera en el Líbano

La situación en el Líbano, en lo que respecta a la mano de obra enfermera, ha sido objeto de estudio con el fin de obtener informaciones adecuadas acerca de las enfermeras profesionales registradas: edad, sexo, nacionalidad, escuela de formación, distribución y tipo de trabajo.

Entre los resultados de especial interés conseguidos mediante ese estudio figuran el conocimiento de la grave escasez de enfermeras profesionales en el país y la proporción relativa elevada de "enfermeras inactivas".

Para mejorar las condiciones de la profesión es esencial conseguir un enfoque coordinado de sus problemas por parte del gobierno y de los organismos de carácter voluntario, así como de otras organizaciones conexas.

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Inactive Nursing Personnel

The study reveals that about 40 % of all the registered professional nurses in Lebanon are not actually practicing nursing, as shown from table VI. Approximately 40 % of these fall in the age group '30-39 years'. Further, 60 % of this 'inactive' group are married. It should be noted that in the age groups '50-59 years and over', the number of inactive nurses is greater among the unmarried.

Type of Work in Respect of Active Nurses

Table VII lists the type of professional activity in which nurses are engaged. The largest group (about 66 % of active nurses) is engaged in hospitals; 11 % in clinics and health centers; 3.7 % each in private nursing and medical social work; 3.4 % in nursing education; 2.8 % in operating room and central sterile services; and 2.5 % in public health. The remaining work in various fields including anesthesiology, midwifery, occupational therapy, and other. About 69 % of the active group work in Beirut. The finding that 119 inactive nurses are unknown justifies a separate follow-up study of this group.

Discussion

In the light of the above findings, the nurse:population ratio for Lebanon is 1:1783 on the basis of a total population of 2,434,200 (1). Per governorate the ratio is 1:786 for Beirut; 1:3338 for Mount Lebanon; 1:3720 for North Lebanon; 1:7631 for South Lebanon; and 1:13,035 for the Bekaa.

It is worthwhile to note that the number of registered professional nurses (1365) is less than that of registered physicians (1539 as shown from a recent study carried out by the same authors (2). This finding confirms clearly the acute shortage of professional nurses in Lebanon.

The high ratio of registered nurses who are not practicing the profession is wasteful and unfortunate. To attract this group back to nursing, governmental and voluntary agencies should improve the status of the nursing profession in terms of salary scale, fringe benefits and working hours. The starting basic salary for a professional

nurse employed by the government is less than that of a Junior typist; this is too degrading indeed to the distinguished profession of nursing. Moreover, hospitals and related institutions should exercise more flexibility in employing nurses on part-time basis.

The social status of nursing should also be improved through further recognition of the nursing profession in its own right. Hospital administrators who employ orderlies and practical nurses to carry out the duties and responsibilities of professional nurses just to save on salaries, should be discouraged from doing so. Otherwise, parents would associate professional nurses with orderlies and even with maids and thus would hesitate to allow their daughters or sons to study nursing.

It is felt that establishing additional schools of nursing in Lebanon should not be given high priority, at least for the time-being. Instead, existing schools should be strengthened and expanded through adequate staffing and student recruitment, particularly as these schools are in a position to accommodate more students. It is also recommended that the educational level of students entering nursing schools should be improved in Lebanon, a country reputed to have the highest ratio of educated people in the area.

The need for professional nurses is expected to rise further in the future so as to face the expanding health services of the country and also to replace loss of nurses through marriage, retirement, migration and death. This requires a team approach, and the problem concerns the medical profession to an appreciable extent. Physicians should demonstrate more interest in improving the status of the nursing profession by offering nurses satisfactory working conditions appropriate to their training and preparation.

Finally, it is encouraging to hear that the establishment of a Lebanese Nurses Association is being actively followed up, and it is hoped that the official agencies concerned will exhaust possibilities to bring the association into existence without delay.

Acknowledgments

The authors are indebted to Dr. Craig S. Lichtenwalner, Dean, Faculties of Medical Sciences, American University of Beirut, under whose guidance this study has been carried out. They also wish to

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