VIEWS OF PRIMARY HEALTH CARE TRAINEES ON THEIR HOSPITAL TRAINING IN INTERNAL MEDICINE AND PEDIATRICS IN SAUDI ARABIA

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هدف الدراسة: دراسة آراء الأطباء المتدربين في الرعاية الصحية الأولية فيما يتعلق بتدريبهم في المستشفيات لدورتي الطب الباطني وطب الأطفال، وكذلك مدى رضائهم عن تلك الدورات.
طريقة الدراسة: أجريت دراسة مقطعية خلال شهر يناير 1996م في أربعة مراكز للتدريب في الرياض والخبر وجدة والمدينة المنورة باستخدام استبيان قام بالاجابة عليه بعض الأطباء المتدربيين ممن أنهوا دورتي الطب الباطني و/ أو طب الأطفال.
نتائج الدراسة: حازت دورة طب الأطفال على رضى كثير من الأطباء المتدربين مقارنة بدورة الطب الباطني. كما وجد أن هناك علاقة ذات دلالة احصائية بين رضى الأطباء المتدربين في دورة الطب الباطني وبين جودة محتويات الدورة ومدى تحقيقها لاحتياجاتهم ($p<0.05$) بينما كان العامل المؤثر في رضى الأطباء المتدربين في دورة طب الأطفال هو مدة الدورة حيث كان هناك اعتقاد بأنه كان كافيا ($p<0.05$) .
هناك العديد من العوامل التي ذكرت كأسباب لعدم الرضى عن التدريب ومنها عدم التوزان بين الوقت المخصص للدراسة وتقديم الخدمات وكذلك قصور الوعي لدى الاخصائيين في الأقسام الأخرى عن تخصص الرعاية الصحية الأولية.
الخلاصة: ينبغي توجيه الجهود للعمل على رفع مستوى التدريب لأطباء الرعاية الصحية الأوليةفي المستشفيات بواسطة التعاون بين صانعي القرار لمتدربي الرعاية الصحية الأولية والاستشاريين العاملين في المسشتفيات- كما يجب أن يؤخذ في الاعتبار احتياجات المتدربين عند التخطيط لعملية التدريب في المستشفيات.
الكلمات المرجعية: متدربي الرعاية الصحية الأولية ، التدريب ، المملكة العربية السعودية.

Objective: *The aim of this study is to assess the perception and satisfaction of primary health care (PHC) trainees regarding their hospital training in Internal Medicine and Pediatrics.*
Methodology: *A cross-sectional study was conducted by means of a self-administered questionnaire distributed to the trainees who had finished Medicine and/or Pediatrics rotation in 4 PHC training centers in Riyadh, Al-Khobar, Jeddah and Al-Medina during January 1996.*
Results: *Trainees were more satisfied with the Pediatric rotation than the Internal Medicine rotation. Significant relationship ($p<0.05$) was found between trainee satisfaction in Internal Medicine rotation and both the quality of training and the relevance of training to the needs of PHC trainees. On the other hand, in Pediatrics, the*

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only variable which was related significantly to the trainees' satisfaction was the duration of the rotation, which was found to be sufficient ($p<0.05$). Trainees' dissatisfaction with the rotation was due to many factors, such as the imbalance between service work and educational sessions and the lack of awareness of other specialists about PHC as a career.

Conclusion: *Attention and effort should be directed towards the improvement of hospital training through a close collaboration between the decision-makers for PHC training and the hospital consultants. Also the needs of trainees should be taken into account during planning of hospital training.*

Key Words: *PHC trainees, training, Saudi Arabia.*

INTRODUCTION

The hospital is a place where most undergraduate medical education as well as postgraduate training takes place, so its contribution to the education and training of physicians in general and primary health care trainees in particular merits scrutiny.[1]

During their postgraduate training, primary health care trainees are exposed to different disciplines such as medicine, pediatrics, obstetric and gynecology and surgery depending on the programme in which they are enrolled whether Diploma, Fellowship or Board. The quality of training in these disciplines requires continuous evaluation since serious educational deficiencies may interfere with training. These deficiencies include imbalance between service commitment that should be provided by trainees and the education that he/she needs to receive.[1]

Dissatisfaction with the hospital component of training for primary health care (general practice) has been forcefully expressed by many trainees and educationalists in general practice.[2] Problems that are likely to be encountered during training include shortage of time for teaching, absence of structured programs of learning in each attachment, long duration of some disciplines, denial of study leave, and teaching which is irrelevant to the needs of primary health care physicians.[2,3]

The implementation of the primary health care (PHC) system in the Kingdom of Saudi Arabia (KSA) was started in 1984. However, the training of PHC physicians was only introduced recently. The first program in the Kingdom for Family and Community Medicine was started in 1983 in King Fahd Hospital of the University at Al-Khobar while in Riyadh it started in 1983 with a Mater's degree program and a Diploma in 1984. The first batch of diplomates graduated in 1986 while the Master's program had its first 6 graduates in 1985. By the end of 1996, the total number of graduates of the two programs was 85. Recently, more programs such as the King Saud Fellowship Program in Primary Health Care and the Saudi Board for Primary Health Care have been established. The first batch of Saudi Board trainees graduated in December 1998. The duration of training for both the Diploma and Master's programs are two years, while the Fellowship and the Board are of 4-years duration. These years of training are spent in educationally approved disciplines in hospitals as well as in primary care centers. The major hospital disciplines in these programs are of similar duration while the major differences are in the time spent in the primary health care rotations in PHC centers. Training takes place at University, Ministry of Health or National Guard

Hospitals. In general, the educational objectives of these and other rotations are to produce competent family physicians who can provide a wide range of services including promotive, preventive, curative and rehabilitative services to individuals, families, and the community.

To our knowledge, there has been no evaluation of the hospital training component in these programs. This study was intended to examine the views and satisfaction of PHC trainees regarding hospital training in Internal Medicine and Pediatrics. Factors affecting training was also evaluated.

METHODS

A cross-sectional study was conducted in January 1996, in 4 PHC training centers: (1) Two centers in Riyadh and Al-Khobar supervised by the University PHC Departments of Family and Community Medicine (King Saud and King Faisal Universities, respectively), and (2) Two centers in Jeddah and Al-Medina supervised by PHC trainers working in these centers. These centers were selected because they had more than 15 trainees in their programs, and they represented different geographical areas in KSA. Besides, these centers started their training programs long before other centers in KSA.

A self-administered questionnaire that included three sections of demographic data, general evaluation of the rotations as well as the evaluation of the contents of the rotations was designed for the survey. A pilot study was performed with the questionnaire and the necessary changes made. The questionnaire papers were distributed by one of the trainees in all four centers to all the trainees (n=82) in the PHC training programs who had finished Internal Medicine and/or pediatric rotations. It is worth mentioning that the duration of the rotation of Internal Medicine varied from 5 to 6 months, while those in Pediatrics varied from 3 to 4 months in the different programs.

Fifty-one trainees completed the questionnaire giving an overall response rate of 62.2%. Of these, 4 trainees had not finished Pediatric rotation at the time of the study.

Data were analyzed by the Systat Program. Chi-square test was used to assess the statistical significance of the different variables.

RESULTS

Details of the demographic characteristics of the respondents show that about one-third of them were from the Al-Khobar Center (Table 1); 75% were males and most of them were married. Their ages (not included in the table) ranged from 27 to 40 years and 27.5% were 30 years old. About 40% were enrolled in the Arab Board Program. Eleven trainees (21.5%) were trained in other specialties before starting the PHC program and only 5 (9.8%) had postgraduate degrees, other than PHC.

As regards to the overall degree of trainee satisfaction with the rotations, there was greater satisfaction with Pediatrics than Internal Medicine rotations. However, this was not statistically significant (Table 2).

On the general evaluation of the rotations (Table 3), the duration of both Internal Medicine (70.6%) and Pediatrics (74.5%) rotations were thought adequate. However, a feedback on their performance was given only to 64.7% and 68.1% of the trainees during the rotation of Internal Medicine and Pediatrics, respectively. About 60% of the respondents in both specialties benefited more from the Pediatrics on-call duties ($p<0.05$). About 65% of the trainees felt confident in managing medical problems compared to 74.5% for the Pediatric problems ($p>0.05$). Most of the consultants in both specialties were only partially aware of the concept of PHC career and of what was required from the PHC trainees. Before commencing training in these specialties, 37.3% and 40.4% of the trainees in Internal

Table 1: *Demographic Characteristics of the respondents (n=51)*

	No (%)
Centers	
Riyadh	11 (21.6)
Al-Khobar	16 (31.4)
Jeddah	13 (25.5)
Al-Medina Al-Munawara	11 (21.6)
Sex	
Male	38 (74.5)
Female	13 (25.5)
Marital Status	
Married	46 (90.2)
Single	5 (9.8)
Which program of PHC you are in currently?	
Diploma	6 (11.8)
Arab Board	20 (39.2)
Fellowship	16 (31.4)
Others	9 (17.6)
Any postgraduate training attended before PHC training?	
Yes	11 (21.5)
No	39 (76.5)
Not answered	1 (2)
If Yes, in what specialty (ies):	
Medicine	4 (36.4)
Pediatric	3 (27.3)
Surgery	1 (9.1)
Obstetrics/Gynecology	1 (9.1)
Others	1 (9.1)
Not answered	1 (9.1)
Is there any degree held, other than PHC?	
Yes	5 (9.8)
No	46 (90.2)

Table 2: *The overall degree of trainee satisfaction with the rotations*

Item	**Medicine No. (%)**	**Pediatric No. (%)**	**p-value**
Are you generally satisfied with these rotations:			
Satisfied	11 (21.6)	16 (34.0)	N.S.
Partially satisfied	28 (54.9)	25 (53.2)	N.S.
Not satisfied	10 (19.6)	3 (6.4)	N.S.
Not answered	2 (3.9)	3 (6.4)	N.S.
Total	**51 (100)**	**47 (100)**	

N.S.=Not significant

Table 3: *Trainees general evaluation of the rotations*

Item	Medicine (n=51) No. (%)	Pediatric (n=47) No. (%)
Do you think the duration is sufficient for the rotation?		
Yes	36 (70.6)	35 (74.5)
No	13 (25.5)	12 (25.5)
Not answered	2 (3.9)	0 (0)
Has a feedback been given during the rotation?		
Yes	33 (64.7)	32 (68.1)
No	16 (31.4)	13 (27.7)
Not answered	2 (3.9)	2 (4.3)
Are the on-call duties, beneficial?		
Yes	30 (58.8)	29 (61.7)*
Partially	13 (25.5)	11 (23.4)
No	7 (13.7)	5 (10.6)
Not answered	1 (2)	2 (4.3)
Do you feel confident in managing common problems after finishing training in these rotations?		
Yes	33 (64.7)	35 (74.5)
No	16 (31.4)	9 (19.1)
Not answered	2 (3.9)	3 (6.4)
Are the consultants of these specialties aware about the concept of PHC career?		
Yes	3 (5.8)	5 (10.6)
Partially	19 (37.3)	25 (53.2)
No	28 (54.9)	15 (31.9)
Not answered	1 (2)	2 (4.3)
Are the consultants in these specialties aware of what is required from PHC trainees?		
Yes	1 (2)	4 (8.5)
No	31 (60.8)	22 (46.8)
Partially	17 (33.3)	19 (40.4)
Not answered	2 (3.9)	2 (4.3)
Have your identified your objectives from these rotations before entering that specialty?		
Yes	19 (37.3)	19 (40.4)
No	10 (19.6)	11 (23.4)
Partially	21 (41.2)	15 (31.9)
Not answered	1 (2.0)	2 (4.3)
If yes, or partially, have you achieved these objectives?		
Yes	14 (35.0)	15 (44.1)
No	0 (0)	0 (0)
Partially	26 (65)	19 (55.9)
Was half-day release course running during your training?		
Yes	23 (45.1)	18 (38.3)
No	27 (52.9)	27 (57.4)
Not answered	1 (2.0)	2 (4.3)
If yes, were you allowed to attend this activity during the rotation?		
Yes	23 (100)	18 (100)
No	0 (0)	0 (0)

Table 3: *(Continued)*

Item	Medicine (n=51) No. (%)	Pediatric (n=47) No. (%)
Were the content of the training:		
Good	24 (47.1)	29 (61.7)
Fair	21 (41.2)	14 (29.8)
Bad	5 (9.8)	2 (4.30
Not answered	1 (2.0)	2 (4.3)
Were the content of training relevant to PHC trainee?		
Relevant	16 (31.4)	16 (34.0)
Partially relevant	28 (54.9)	21 (44.7)
Not relevant	6 (11.8)	8 (17.0)
Not answered	1 (2.0)	2 (4.3)
How do you assess the balance between service work and educational sessions?		
Good	21 (41.2)	20 (42.6)
Fair	9 (17.6)	15 (31.9)
Bad	20 (39.2)	9 (19.1)
Not answered	1 (2.0)	3 (6.4)
Was there an outpatient clinic training during these rotation?		
Yes	31 (60.8)	24 (51.1)
No	16 (31.4)	18 (38.3)
Not answered	4 (7.8)	5 (10.6)

*$p<0.05$

Medicine and Pediatrics respectively knew the objectives of the rotations. However, these objectives were fully achieved by only 35% and 44.1% of the trainees in Internal Medicine and Pediatrics respectively who had identified the objectives.

Half-day release course (HDRC) was available to 45.1% and 38.3% of the trainees during Internal Medicine and Pediatric rotations respectively. Evaluation of the content of the training showed that 47.1% of the trainees thought that Internal Medicine rotation was good and the corresponding figure for Pediatrics was 61.7%. Nearly half of the trainees found that the contents of the training were partially relevant to the needs of PHC trainees in both rotations. The balance between work done as a service and the educational sessions was thought to be good by 41.2% and 42.6% of the trainees in Internal Medicine and Pediatric rotations, respectively.

Outpatient clinic training was provided for only 60.8% of the trainees during the Internal Medicine rotation and for 51.1% of the trainees during Pediatric rotation. When the relationship between trainee satisfaction and the content of training was assessed, a statistically significant difference was found in the level of satisfaction during the rotation of Internal Medicine, between the groups of trainees who perceived the content of training as good and relevant to their needs and those who were not. Trainees who felt that the content of training was good and relevant to their needs were more satisfied than the other group ($p<0.05$) (Table 4). The evaluation of Pediatric rotation in relation to trainees' satisfaction revealed a statistically significant difference in the satisfaction level between the groups of trainees who perceived the duration of the rotation as adequate and those who thought it was not. The former group was more satisfied than the latter group ($p<0.05$) (Table 5).

Table 4: *The relationship between trainees' satisfaction and some of the contents of training (Medicine)*

Item	Satisfied No. (%)	Partially satisfied No. (%)	Not satisfied No. (%)
Center			
Riyadh	2 (18.2)	6 (54.5)	5 (27.3)
Al-Khobar	3 (20.0)	9 (60.0)	3 (20.0)
Jeddah	4 (33.3)	8 (66.7)	0 (0)
Medina Al-Munawarah	2 (18.2)	5 (45.5)	4 (36.4)
Duration of the rotation:			
Sufficient	8 (22.9)	21 (60.0)	6 (17.1)
Not sufficient	3 (23.1)	7 (53.8)	3 (23.1)
On-call duties:			
Beneficial	9 (31.0)	17 (58.6)	3 (10.3)
Partially beneficial	1 (7.7)	8 (61.5)	4 (30.8)
Not beneficial	1 (14.3)	3 (42.9)	3 (42.9)
Consultant awareness about the concept of PHC career:			
Yes	1 (50.0)	0 (0)	1 (50.0)
Partially	5 (26.3)	13 (68.4)	1 (5.3)
No	5 (17.0)	15 (53.6)	8 (28.6)
Content of training:			
Good	8 (33.3)	15 (62.5)	1 (4.2)*
Fair	2 (10.0)	12 (60.0)	6 (30.0)
Bad	1 (20.0)	1 (20.0)	3 (60.0)
Relevance of training to PHC trainees:			
Relevant	8 (50.0)	7 (43.8)	1 (6.3)*
Partially relevant	2 (7.4)	19 (70.4)	6 (22.2)
Not relevant	1 (16.7)	2 (33.3)	3 (50.0)

*p<0.05

Table 5: *The relationship between trainees' satisfaction and some of the contents of training(Pediatrics)*

Item	Satisfied No. (%)	Partially satisfied No. (%)	Not satisfied No. (%)
Center			
Riyadh	7 (63.6)	3 (27.3)	1 (9.1)
Al-Khobar	3 (20.0)	16 (66.7)	2 (13.30
Jeddah	2 (22.2)	7 (77.8)	0 (0)
Medina Al-Munawarah	4 (44.4)	5 (55.6)	0 (0)
Duration of the rotation:			
Sufficient	15 (46.9)	16 (50.)	1 (3.1)*
Not sufficient	1 (8.3)	9 (75.0)	2 (16.7)
On-call duties:			
Beneficial	11 (39.3)	15 (53.6)	2 (7.1)
Partially beneficial	4 (36.4)	6 (54.5)	1 (9.1)
Not beneficial	1 (20.0)	4 (80.0)	0 (0)
Consultant awareness about the concept of PHC career:			
Yes	3 (75.0)	1 (25.0)	0 (0)
Partially	7 (28.0)	16 (64.0)	2 (8.0)
No	6 (40.0)	8 (53.3)	1 (6.7)
Content of training:			
Good	14 (50.0)	13 (46.4)	1 (3.6)
Fair	2 (14.3)	10 (71.4)	2 (14.3)
Bad	0 (0)	2 (100)	0 (0)
Relevance of training to PHC trainees:			
Relevant	9 (60.0)	5 (33.3)	1 (6.7)
Partially relevant	5 (23.8)	16 (76.2)	0 (0)
Not relevant	2 (25.0)	4 (50.0)	2 (25.0)

*p<0.05

DISCUSSION

The quality of hospital training for PHC doctors should be continuously evaluated to ensure that it fulfills their future career responsibilities. Although the findings in this study were based on a doctor's subjective recollections of two clinical disciplines, which in some cases had been completed sometime before the study, it highlighted some defects in the training process. It must be stated that one limitation of this study is that it did not reflect the entirety of the hospital-based training. Interestingly, 21.5% of the trainees had received previous training in other specialties but only 9.8% had postgraduate degrees other than PHC, which reflects the ease of entering a residency programme and the lack of regulation to prevent wastage in these programmes.

Trainee satisfaction with the rotations showed that they were more satisfied in Pediatric rotations than Internal Medicine rotations, although this difference was not statistically significant. Similar dissatisfaction has also been reported in other previous studies in the UK for which trainees and educationalists suggested that the hospital component of the training should be restructured and the teaching improved.[1-6]

The principal complaints of trainees in this study were: (1) the irrelevance of training to PHC trainee needs, (2) low level of teaching, (3) imbalance between service work and educational sessions, and (4) the lack of recognition by the specialists of PHC as a career as well as their discernment of its goals and objectives, their grasp of the PHC trainee's needs, with regard to the knowledge and skills to be acquired and attitudes that must be developed.

Similar findings have been reported in other studies.[1,2,5,7] Overcoming these deficiencies is a major challenge for those involved in postgraduate medical education.[2]

The factors contributing to these inadequacies may be related to many factors including poor interaction between hospital consultants and PHC workers, personal attitudes of some hospital consultants who still regard PHC career as inferior, inadequate number of staff in hospital departments, a situation which over burdens PHC trainees, the lack of incentives for the teachers , unenthusiastic trainees and the shortage of hospital consultants available for training, as most are attracted to better working conditions outside the training institutes.

However, the fundamental problem may not simply be the lack of organization of the hospital-based training but rather the failure to involve hospital consultants in the planning of the training program.

This has been emphasized by Tait[8] who suggested that the planning of the training programmes should be done by PHC teachers in collaboration with the hospital consultants involved in the training.

Trainee satisfaction during the rotation of Internal Medicine was related significantly to the relevance of training and to the quality of the content of training. These two points should be considered seriously in planning the medicine rotation, while in Pediatrics the only variable which was related significantly to trainee satisfaction was the duration of the rotation, which was thought to be sufficient.

Nearly half of the trainees mentioned the hospital consultants' lack of regard for them. This was in agreement with what was reported in another study,[9] in which 75% of the respondents thought that they were looked on as junior doctors rather PHC trainees. The correction of this attitude would go a long way to improving the quality of hospital training and consequently the trainee satisfaction.

CONCLUSION

It is self-evident that PHC doctors need a kind of training which focuses on the skills re-

quired to deal most effectively with the problems presented to them by their patients and their community. Therefore, all effort should be made towards the improvement of the hospital training. This can only be done through the collaboration between designers of the PHC training and the hospital consultants. The trainee's future role underpins the success of the PHC service and should, therefore, not be underestimated.

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