A Survey of University of Medical Sciences' Administrators and GPs on the Current and Ideal Role of General Practitioners in Iran

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Abstract

Background and purpose: *roles and tasks of intended graduates direct medical eductionist for developing the right curriculum. In Iran there has been no systematic study on defining GPs roles. This study is an attempt to systematically clarify the roles of GPs in Iran.*

Methods: In this questionnaire – based survey executive directors of Universities of medicine of Iran and general practitioners participated. The subjects were selected through stratified sampling procedure. A semi-structured questionnaire was developed which covered the goals and functions of health system as mentioned in World Health Report 2000. For content validity a panel of experts including health care professionals, biostatisticians, and psychometrist evaluated the questionnaire. For the reliability of the questionnaire a pilot study was carried out. Chronbach's coeficient were calculated as 0.89 .The final revision of the questionnaire included 15 roles in current and ideal states. The respondent should score each role in both states in a range of 0-100.

Results: *Of 94 subjects who received the questionnaire, 71 (80%) completed and returned it. Of all subjects 42.2% were female and 57.8% were male. Of all subjects 25% were faculty members. The subjects believe that in the current state "health care provision" (85.4±18.6) "health center administration" (57.8±24.8), and "leading clinical services and coordinating patients care" (47.6±26.8) are more evident while "fund holding" had the lowest rank(5.0±10.0). They believed that in an ideal national health system physicians should play most of these roles in various extents.*

Conclusion: *The participants believed that GPs should play other roles beyond the clinical care provision to enable health system respond to community needs and expectations. The graduate medical degree should be reformed if the gradates are going to play these new roles.*

Key words: *Role Definition, Curriculum Development, GP, Primary Health care*

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Introduction

Nowadays health system of a country plays an important role in its sustainable development. Human resources are a major requirement for health systems to reach their goals. In training workforce, a well developed curriculum is a cornerstone. The curriculum helps the educational system to produce graduates with characteristics required to good fulfillment of their tasks. The first step in planning any curriculum is a careful community needs assessment (1). Based on the identified needs of the community and the expectations that the graduates should respond to, the roles and tasks of these graduates can be identified. Based on defined roles the curriculum developers plan a curriculum that train students who will be able to play the defined roles. Without these defined roles planning a curriculum that respond to community needs is not possible (1). In Iran's health system, General Practitioners (GPs) are widely distributed and provide the health and medical care for community. Many countries introduced several changes in their health care system including new role for their GPs in order to reach to a more effective and efficient health care (1, 2, 3, 4, 5).

In Iran there has been no systematic study on defining GPs role, so any attempt to systematically defined these role will be an urgent need for health care system which clarifies its expectations from GPs and for medical education system which help them to plan curriculum that trains graduated who are most capable in playing those role and fulfilling their tasks.

Methods

In this questionnaire – based survey deputies for health of universities of medicine directors of health networks and general practitioners working in family physician plans were included. The subjects were selected through stratified sampling procedure. The subjects were contacted and agreed to complete the questionnaire.

For developing the questionnaire, a literature review of primary health care provider tasks and roles of general practitioners were carried out as the next step in depth interviews were consulted with GPs working primary health care settings, health care professionals, and GPs working in Ministry of Health and Medical Education.

Based on findings of interviews and literature reviews a questionnaire was developed which covered the goals and functions of health system as mentioned in World Health Report 2000 (6). For content validity a panel of experts including health care professionals, biostatisticians, and psychometrist evaluated the questionnaire.

After revising the questionnaire based on the expert panel feed back, for the reliability of the questionnaire a pilot study was carried out. Chronbach's αs were calculated as 0.91 for currant state, 0.92 for ideal state and 0.89 for both part as a whole.

The final revision of the questionnaire included 15 roles in current and ideal states. The respondent should score each role in both states in a range of 0-100.

The roles were: Role 1: health care provision for patients

Role 2: leadership of clinical services, coordinating patients care

Role 3: Health promotion, patient education, individual health improvement

Role 4: Educating individuals to reduce the effect of social determinants of health

Role 5: disease management in a defined population

Role 6: community health risk management

Role 7: community leadership and management of social determinants of community health

Role 8: training the primary health care team

Role 9: Health policy research (or analysis)

Role 10: Health service research
Role 11: Clinical, basic, epidemiologic research
Role 12: Medical education research
Role 13: Gate keepering of health care system
Role 14: fund holding
Role 15: administration
The data were analyzed with SPSS ver. 16. The findings examined for significance with t-test.

Results

Of 94 subjects who received the questionnaire, 72 (76.6%) completed and returned it while at least they had received 3 reminder calls. All but one returned questionnaires were analyzed . Of all subjects 42.2% were female and 57.8 were male. Of all subjects 25.3% were faculty members with 60% of them having experience on earring out workshops, published books, articles and lead research projects in, health policy, curriculum development, teaching methods, educational evaluation, and health economy. Almost 66% of subjects had at least 2 years experience as an executive director in universities health networks. Of all subjects 89% expressed their willingness to collaborate in next phases of this project
The subjects believed that in the current state "health care provision" ((85.4±18.6) "health center administration" (57.8±24.8), and "leading clinical services and coordinating patients care" (47.6±26.8) are more evident while "fund holding" has the lowest rank (5.0±10.0). They believed that in an ideal national health system physicians should play most of these roles (Table 1). All differences between current and ideal state were significant ($P < 0.05$).
As shown in table 1 role 8 "training the primary health care team" had the highest difference (56.7) while role 1 had the lowest difference (0.6). The differences shown in table 1 indicated that if a reform in medical education is going to take place, role 8,10 13 and 9 had higher priority for inclusion of relevant intervention in the curriculum (see table 1). It is noteworthy to remind that for developing curriculum other roles are also important and one should evaluate which interventions lead to graduates more similar to health systems demands.
The scores classified into 5 groups of zero (which means the role in current state is non-existence, and in ideal state is not essential at all, 1-25, 26-50, 50-75, 76-100 (Table2 and 3).
In the current state all subjects believed that GPs had role 1 and 15 so no one gave zero to this roles (table 2), while for other roles (2-14) the subjects gave zero which means that they believed that these roles are non-existence in their views; 80% of respondent believed that role 14 (fund holding) is not existed in current health system for GPs.
We divided the roles into major and minor roles with the definition of major roles being a score of 76 or higher by more than 50% of respondent. Table 2 shows that in the current health system role 1 (Health care provision) is the only major role of GPs, while in ideal state roles 1, 2, 3, 8, 13, and 15 are major roles and the rest can be considered minor roles (table 4).
Table 4 shows the mode of subjects choice for each role in current and ideal state. Considering in role 1 most subjects gave 100 for current (35%) and 100 for ideal (48%) state while for role 14 most subjects gave zero for current state (60%) and 30 for ideal state (20.9%). This means that subjects believed that role 14 (fund holding) is a role that should be included in GPs role in ideal health systems to lesser extents. Most subjects belived that roles 1,2,3,8,13, and 15 are GPs' role in ideal state.

Discussion

In this study we used the outcome-based model of education and attempted to clarify the roles of GPs in Iran's healthy system. We developed a tool for role clarification of GPs which seems appropriate

to be used in other countries health system.

Here we did our best not to mixed up roles with "competences", "meta competences" and "general characteristics" which is evident in other similar studies such as studies carried out by ACGME (7), WHO (2, 8) AAMC (9) and Can MEDS (10, 11) and other studies (12-15).

Our respondents believed that in current state the major role of GPs in "health care provision" (table 1). Although roles such as administration, leading the clinical service and coordinating patients care and health promotion and patient education are particularly played but they are not carried out to their full extent (table 1).

Health system needs that GPs carry out a wide variety of tasks including, patients and community empowerment through health promotive activities, a continuous quality service provision, through strengthening leadership and coordinating clinical care, controlling social determinants of health through community leadership, management of scarce health care resources through gate keepering. To do these tasks and play these roles, medical should be changed (16).

In our study the respondents believed that GPs should go beyond clinical care provision and strengthen activities in areas of leadership of clinical services and coordination of patients care health promotion, patient education, , administration, gate keepering,and training the primary health care team. In a study by Sangster et al in Nova Scotia in 1999, the participant doctors acknowledged seven roles for GPs including clinical care, coordination, counseling, patient education, health promotion and patient advocacy, disease prevention and gate keepering (17). The study by Canadian Medical Association in 1994 reported these roles as well as, researcher collaborator and life-long learner for GPs (15). In 2003 in Netherland a guide for modernizing medical education based on "Can MEDS 2000" pointed out these seven roles (18,19). In a similar study in Denmark to evaluate generalizability of roles proposed by "Can MEDS 2000", 874, GPs scored a mean of 4.2 out of 5 (20).

Gate keepering makes GPs accountable for expending health care scarce resources which has been shown to lead to more equitable and effective use of these resources (21, 22, 23). Promotion of role 2 will lead to more integrated continuous care contributing to provision of right care to the right patient, in a right time (24, 25).

The education of primary health care team by GPs has been emphasized by respondent (table 1, 4). Many studies have shown that this could learn to better care in primary health care settings but other advantages have not been well-studied (26-32).

The strengthening of role 3 has been emphasized by our respondent since it empowers individuals and community in protecting their health and contributes to more cost effective delivery of health care. This in turn helps policy makers with rationing decision because they can improve coverage or quality of services that would be saved (33-37). The countries where GPs play this role have maximized all three main purpose of their health system namely Health, Justice, and Satisfaction (38-40).

The participants in this study believed that leadership of clinical services, coordinating patients care is the most important role of GPs which is in contrast to the studies in other countries that showed that health care provision for patients is the major role of physicians(5,9,10,11,12,41). This shows that the respondent preferred clinical leadership over continuity of care.

The fund holding was not considered a role for GPs with most respondent giving zero. This shows that GPs are not required to play this role. The experience in other countries also confirms our results. Fund holding is practiced in some trusts of National Health system of UK (42-46).

Looking to the major roles identified in our study which are roles 8,10,13,9, 11(table 1), one sees that the respondents wanted that GPs role become

one of community oriented physicians and a researcher and a strengthened primary health care. More over as training the primary health care team and health service research had highest priority it is evident that the respondents prefer a trainer researcher GP to change the primary healthcare centers to centers capable of on service training applied research.

Table 1: Mean and standard deviation of current and ideal state of GPs' role based on health care professional scoring

Roles	Current state Mean±SD	Ideal state	76-100
1	85.4±18.6	86.0±16.5	0.6±21.1
2	47.6±26.8	88.4±14.8	40.8±26.8
3	37.3±20.8	83.5±17.0	46.2±21.7
4	19.6±19.7	58.3±29.5	38.7±26.5
5	26.0±20.5	75.2±21.4	49.2±20.7
6	16.7±15.3	64.9±25.8	48.2±24.2
7	12.1±14.9	57.9±26.7	45.8±22.8
8	24.7±24.5	81.4±19.7	56.7±24.9
9	7.9±10.6	58.5±26.5	50.7±25.8
10	10.8±14.7	66.8±21.8	56.0±22.5
11	16.0±18.2	66.3±22.7	50.3±27.5
12	7.8±12.5	52.5±32.4	44.7±28.1
13	20.7±18.7	75.9±22.2	55.2±26.0
14	5.0±10.0	46.6±31.0	41.6±30.0
15	57.8±24.8	86.4±17.3	28.6±30.1

Table 2: Frequency distribution of research and education directors' scoring of current state of GP roles by categories

Scores category / Roles	0	1-25	26-50	51-75	76-100
1	0	4.9	11.6	12.2	71.3
2	2	30.5	28.8	18.8	19.9
3	0.5	37.5	40.5	10.4	11.1
4	22.7	50.6	16	6.1	4.6
5	19.2	37.7	17.1	12.5	13.5
6	27.5	35.7	14.8	10	12
7	23.1	43.4	11	10.5	12
8	14.8	45	16.3	11.6	12.3
9	42.8	43	5.5	8.7	0
10	40	41	13.5	5.5	0
11	20.8	50	18.5	8.7	2
12	49	35.5	15	0.5	0
13	22	44	12.2	10.7	11.1
14	60	17	23	0	0
15	0	10.2	41.3	23	25.5

Table 3: Frequency distribution of research and education directors' scoring of ideal state of GP roles by categories

Scores category / Roles	0	1-25	26-50	51-75	76-100
1	0	0	10.3	15.3	74.4
2	0	0.5	6.3	15	78.2
3	0	0	6	16.5	77.5
4	2	11	26.2	20.3	40.5
5	0	7	21	28	44
6	0.5	7.5	36.1	22.7	33.2
7	1.6	11.8	40.6	23	23
8	0	5.3	13.1	17.6	64
9	4.9	10.9	35.9	29.6	18.7
10	2.2	6.1		21.7	29.9
11	0	5	40.1	26.9	23.1
12	10	20.9	40	15.4	19.8
13	0	2.4	33.9	19	58
14	20.9	21.9	20.6	13.1	14.3
15	0	1	29.8	20	66

Table 4: The mode and its rate for each GPs role based on research and education directors' scoring

Scores category / Roles	Current state		Ideal state	
	Mode	Rate	Mode	Rate
1	100	35	100	48
2	20	18.7	100	48.4
3	20	28	100	33.5
4	0	22.7	80	20.9
5	10	23.1	80	18.1
6	10	31.9	50	21.4
7	10	43.4	50	18.1
8	10	27.5	100	24.2
9	10	43	50	28.6
10	10	41	50	29.1
11	10	50	50	25.3
12	0	49	50	21
13	10	44	100	26
14	0	60	30	29.8
15	45	41.3	100	33

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