DISCUSSION

Pregnancy is one of the most important periods in the life of a woman, a family and a society. Extraordinary attention is therefore given to antenatal care by the health care systems of most countries. The care provided needs to be appropriate and not excessive for each pregnant woman based on her own needs and wishes. [59]

The World Health Organization (WHO) definition of antenatal care includes recording medical history, assessment of individual needs, advice and guidance on pregnancy and delivery, screening tests, education on self-care during pregnancy, identification of conditions detrimental to health during pregnancy, first-line management and timely referral of high-risk pregnancy. The WHO measures antenatal care as the percentage of women who utilized antenatal care provided by skilled birth attendants for reasons related to pregnancy at least once during pregnancy among all women who gave birth to a live child in a given time period.[60]

The concept of quality of care is becoming increasingly recognized as a key element in the provision of health care, it links the outcome of care with the effectiveness, compliance and continuity of care.[61]

This study intended to assess the adequacy of care provided to pregnant women during their initial visit for ante-natal care at family health units in Alexandria. Assessment was carried out by identify the degree of conformity of physician performance to national guidelines of ante-natal care, moreover, this study aimed to reveal the effect of some relevant factors including job satisfaction of physicians on adequacy of performance. The total number of family physicians observed and interviewed in this study was 119 physicians who worked in 24 family health units all over the eight districts in Alexandria governorate.

Besides the core position that antenatal care occupies for its relation to maternal and child health, it can be considered a sensitive probe to monitor physicians performance in primary health care settings as it is a widely used types of health care in all communities regardless its level of development.

Physicians working in both Borg El-Arab and East districts represented the highest percentage of the study sample (table 1). Concerning low population density in Borg El-Arab compared to other districts as El-Montaza for example, it would have been unexpected to find an excess of working physicians in this low population district. However, this could be explained by the relative shortage of other alternatives of services (e.g.: private) which compelled excess number of health service clients to seek care in governmental family health facilities. A health care authority might have increased physicians in these service to cope with the excess demand.

A logic picture is revealed by a combined look at age distribution of physicians where about 40.0% were below 30 years of age (i.e: fresh graduates),and another 42.0% of them who did not attend any training programs yet. However such opportunity needs to be widened as it is one of the effective tools to manpower development in health care. Attendants of training courses had significantly higher total SI as well as total MAS.(Tables 6 and 10)

Uncertain response to job satisfaction attitudinal statements were not leading the scene in any of the 29 ideas inquired about. In fact they came in last percentage position, generally with wide difference in 24 statements. The author of this research considers this a positive finding. Vague perception is an undermining factor in any effort to change the reality to a better one.(Table 4)

Fortunately the majority of highest percentages of responses to satisfaction statements were of positive attitudes.(19 out of 29). The rest (i.e:10 statements) were of negative attitudes. Five of the ten negative response statements were related to the area of opportunity to develop. Also, SI in the area of opportunity to develop was the second lowest among other areas of satisfaction (Table 4 and 5).A study in South Africa made a more positive conclusion stating that about 83% of physicians included were satisfied with the available opportunities to develop.[62]

It can be recalled here, that the age range of physicians in this study extended from 25 to 49 years. A question can be asked here whether, it is right from the quality point of view to leave experienced physicians holding the same responsibility of junior ones?

Other two of the ten negative attitudes were related to money shortage (statement 3,11in table 4). This was a complaint regarding the physician income as well as the service resource needs.

Time pressure was also a problem as revealed by that area of satisfaction getting the lowest SI. Also in (statement 22), the highest percentage of physicians agreed that they spend a lot of time doing what can be done by others with less experience and training. Moreover, the highest percentage of responses to statement 20 (table 4) were of those agreeing that there are many non-clinical tasks in what they have to do. It can be added that the highest responses to (statement 18) was of those agreeing that they have sufficient time for each patient .Collectively, it can be concluded that the problem is not in absolute shortage of time but relative distribution of time on different work tasks or in other words job description. Timely services is one of the basic features of high quality health care. Every effort should be directed to ascertain this by wise allocation of workers' time.

Another statement that was for response of negative attitude in its highest percentage was that concerning management style (statement 29). Shortcomings of managerial style and administrative inclinations in health care systems are known to impede developmental plans in such settings. This finding is generally in agreement with those derived from a study in Serbia(2007).[63]

To sum up many obstacles to achieving job satisfaction are evident from findings of the present study. Self realization ambition, work circumstances and financial state were jeopardizing the state of satisfaction with comparable degrees.

Considering the total SI reveals that it was evidently low (about 48%±19, table 5).A comparable study in South Africa concluded a similar finding where only 53% of physicians were generally satisfied[64]

Various research resources indicate that there is an association between job satisfaction and motivation. Motivation is hard to define, but there is a positive correlation

between job satisfaction, performance and motivation, whereby motivation encourage an employee, depending on their level of job satisfaction, to perform in a certain manner.[65]

The author argues that the two areas of lowest SI (i.e: time pressure and opportunity to develop, table 5) are those most amenable to improve by organizational modification.

Other areas of satisfaction, namely; relation with patient , responsibility and staff relations had the highest three SI of satisfaction respectively (Table 5). This is an assuring finding as -again as argued by author – these better areas are the harder to improve. Buccunie et al (2005) reported that the highest percentages of physicians are generally satisfied with their responsibilities.[66] Jain et al in their study (2009) pointed to the importance of staff relations in providing a favorable work environment[67]

Examined demographic characteristics (eg: age and marital status) showed no significant association with satisfaction state (Table 6). Females had a non significantly higher total SI as well as a significantly higher score in general satisfaction. A conforming result was documented by Martini et al(1994) who explained that females are more likely to choose primary health care careers[68].

Although, physicians with the two longest intervals of duration of experience got the highest value in most satisfaction areas and total SI , yet the differences were insignificant (table 6). A study conducted in Saudi Arabia (2006) reported a better state of job satisfaction with longer duration of work. This study attributed this to better adjustment at work, less conflict between work and personal life and greater rewards[69]

Higher scientific qualification (diploma or master) had a positive effect on satisfaction state. As logically expected, the differences were significant in area of opportunity to develop and total SI . This finding is in support of the previously discussed idea of opportunity to develop as a serious threat to state of job satisfaction. Other studies by Kirwan M, Armsrong D (1995) and McGlone SJ, Chenoweth IG (2001) reached the same present result.[70,71]

Although attendance of training programs had positive significant effect on total SI as previously mentioned, yet no such significant difference was found as regard opportunity to develop (table 6). It can be understandable that higher scientific qualification bears a more profound effect on personal development than that of training programs. Training only upgrades task handling abilities of workers.

A reservation is to be made before discussing the findings of the present research as regard adequacy of performance. Assessing performance by direct monitoring of workers is currently inevitable and unreplacable. However, this methodology definitely has its weakness in the fact that observed performance would never be the same as unobserved one.

The total MAS was about 80%±12 (Table 8). Physical examination was the worst task of performance in both the percentage of the fully met category as well as in the MAS (16% and 55.62%±12.56) respectively (Table7, 8). Needless to say that adequate performing of the task of physical examination is crucial to detect many abnormalities in the course of pregnancy for both the expectant mother (eg: B.P measurement) as well as the fetus (eg: vaginal examination).[72]

This poor performance may be attributed to lack of training of physicians and subsequently their inefficiency in obstetric examination skills as well as shortage in basic supplies or its out of order state. Similar observation were made by WHO in developing countries.[73] Studies in other countries also revealed that the quality of ANC in most public health facilities is affected by deficiency in clinical skills. Lack of necessary equipments and resources compared to private facilities mainly due to inadequate funding. In Kenya, the frontiers program found out that inadequate staff training and shortages of equipment and supplies inhibit the full provision of service. [74,75]

This last present finding is somehow unexpected if it is recalled that the highest SI was in the area of relation with patient (Table 5). This contrast may be partially alleviated by stating that on the other hand, tasks of delivering health educational messages and displaying appropriate manner occupied two of the four first positions in both percentage of fully met category as well as MAS (Table7, 8)

The second worst task was that of investigations ordered (in both percentage of fully met category and MAS (table 7, 8). This could be explained by the Wassermann test that is included in the guidelines together with other routine laboratory tests of ante-natal care. Nevertheless it is infrequently ordered or carried out due to shortage in test kits. A similar conclusion was reported by a study in Sub-Saharan Africa where the majority of pregnants attending for ANC were denied syphilis screening test due to shortage of kits.[76]

The task of registration was the best in the percentage of physicians who fully carried it out as well as its MAS (table7, 8). Adequate recording of performance output information is undoubtedly recommended. However, it might be feared that this finding may reflect a culture of paper filling at work place. It can be added here that adequacy score of registration task was negatively and significantly correlated with SI in both areas of opportunity to develop and relation with patient (table 11).

Adequacy of referral task came second after that of registration (table 7, 8), in both percentage of fully met category and MAS. A study in Malawi reported that there was no proper system of referral of antenatal women to higher level facility due to transportation problems[77]. Nevertheless reserved look is needed in this issue. A controversial question is raised: Does higher level of adequacy in the task of referral indicate a better performance or on the contrary reflect shortage of self trust on part of physicians. In the guidelines of ANC, referral is resorted to when there is a high risk pregnancy case, However, there are added instructions to carry out more frequent referral during the ante-natal care period irrespective of the classification of case whether low or high risk female. In support of idea of lack of trust is the finding denoting that the only task in which MBBCH holders attained the highest MAS was that of referral (table 10). This may relate to their lack of experience in diagnosis and management of cases.

From another perspective, the percentage score of referral was significantly and positively correlated with satisfaction in the area of responsibility (table11). Further elaboration in this respect needs deeper insight in job related psychological interactions of physicians.

Oldest physicians attained highest scores of adequacy in all tasks of performance-except ordering investigations-. The differences were significant in delivering educational

messages as well as in total MAS (table 10).The exception of ordering investigation might be explained by their better knowledge of the unavailability of test kits in the facility.

Gender played an insignificant role in adequacy of performance.

Expectedly, married physicians obtained higher scores of adequacy compared to single ones in all tasks except referral and total MAS. The difference was significant in one communication task that was delivering health educational messages (table 10).

Duration of experience in the field of primary health care had no significant effect on adequacy of performance

Holders of higher scientific qualifications got higher scores of adequacy in all tasks and total MAS except that of referral. However the differences were insignificant except for that of physical examination where holders of diploma got the significantly highest score (table 10).

A notable alarming result was about stability of performance between first and second rounds of observation in field work of the present research. Referral was the only task that showed a significantly higher percentage score of adequacy in the second observation round.

Adequacy of performance in registration task as well as that of displaying appropriate manner showed higher scores in first round compared to the second with no significant difference between the two. As for manner, it can be understandable that it is largely inherent personal trait that is barely a subject of variation.

Except for manner and registration, all other tasks and total MAS were significantly higher in first compared to the second observation round (table 9). This finding indicates a serious defect in standardization of performance.

Standardization of performance is corner stone of the idea of quality of health care. Moreover, lack of standardization also jeopardize a basic principle of primary health care; that is being equitable.

Examining the correlation between job satisfaction state and performance in the present research revealed that satisfaction was a significant positive correlate of performance in many tasks (table 11).

MAS of task of history taking was significantly and positively correlated with SI in areas as opportunity to develop, responsibilities, relation with patient and total SI . MAS in examination, on the other hand correlated positively and significantly with opportunity to develop, relation with patient and total SI.

MAS of delivery of educational messages was significantly and positively correlated with SI in both opportunity to develop and responsibility.

Logically, MAS of manner was positively and significantly correlated with SI of relation with patient.

Furthermore, the total MAS was significantly and positively correlated with SI of opportunity to develop, responsibility, relation with patient and total SI .

It can be noticed that most correlations involved intrinsic motives of performance and excluded non intrinsic ones (i.e: opportunity to develop, responsibility, and relation patient compared to general satisfaction, time pressure and staff relations respectively)

If the findings of this study are to elect the most powerful variable that played an evident role in both job satisfaction state and adequacy of performance it would have been – as argued by the author – opportunity to develop.

CONCLUSION

The present study concluded the following:

- Geographical distribution of interviewed physicians was not proportionate to population density in districts of Alexandria governorate.
- Majority of interviewed physicians were females. Physicians' age range was wide, while the mean was young.
- The highest percentage of physicians had a short duration of experience and held on MBBCH degree as their current scientific qualification. About three fifths of physicians had previously attended training programs.
- The highest percentages of physicians' responses to attitudinal statements indicated positive state of satisfaction.
- Responses denoting unsatisfaction state were related to opportunity to develop, financial obstacles, time pressure and managerial style.
- The mean total satisfaction index was low. The worst areas of satisfaction were general satisfaction, opportunity to develop and time pressure. The three areas that had higher satisfaction index were responsibility, relation with patient and staff relation.
- Higher scientific qualification and attendance of training programs were significantly associated with better satisfaction state.
- Total adequacy score of physicians' performance was in late seventies. The following gradient is in descending order of adequacy of different tasks of performance: Registration, referral, manner, delivering educational messages, history taking, investigations ordered and lastly physical examination.
- Physicians' performance was significantly better in most tasks in first observation of physicians compared to the second one.
- Both older age and being married were associated with significantly better performance in delivering educational messages to clients.
- Total adequacy score was significantly higher for attendants of training programs compared to non attendants.
- There were several positive significant correlations between job satisfaction index in different areas with scores of performance adequacy in various tasks.