PAKISTAN JOURNAL OF PUBLIC HEALTH

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Original Research

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The Pak J Public Health accepts articles from both national and international contributors with a special emphasis on research that will have a direct impact on the practice of public health in Pakistan and around the world. The types of articles accepted include original articles, review articles and short communications. Special features will include opinion pieces, letters to the editor, education forum and students corner.

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Preparation of Manuscripts
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Abstracts of original research article should be prepared with a structured format i.e. Introduction/background, objectives, methods, results and discussion/conclusion. Authors must include 4-6 key words. Review article, Case report and other require a short, unstructured abstract. Commentaries do not require abstract. Abstract should not exceed the word limit of 300 words for original articles and the total word count not more than 3000 words, excluding the abstract and references.

Introduction
This section should include the purpose of the article. The rationale for the study or observation should be summarized; only strictly pertinent references should be cited; the subject should not be extensively reviewed. Data or conclusions from the work being reported should not be presented.

Methods
This section must include the type of study, study population, study area, study duration, details of developing tools for data collection, pre-testing, data collection, plan of analysis, ethical considerations and any other detail deemed necessary to be submitted to support the researchers’ work. References to established methods should be given, including statistical methods; references and brief descriptions for methods that have been published but are not well known should be
provided; new or substantially modified methods should be described, giving reasons for using them, and evaluating their limitations.

Results
These should be presented in a logical sequence in the text, tables, and illustrations. All the data in the tables or illustrations should not be repeated in the text; only important observations should be emphasized or summarized.

Tables and figures
Tables and figures should be kept to a minimum. Tables must be comprehensible without reference to the text, References should not be cited in the tables. Authors should indicate at approximately what point in the text the table should appear. Figures, graphs, drawings etc. should not be over complex and must be intelligible when reduced in size for printing. They should be on separate sheets, numbered and with legends. Number tables consecutively in accordance with their appearance in the text. Place footnotes to tables below the table body and indicate them with superscript lowercase letters. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

Discussion
The author's comment on the results, supported with contemporary references, including arguments and analysis of identical work done by other workers. A summary is not required.

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A comprehensive, evidence-based review of the literature relating to an important, major public health area, with a critical analysis and conclusions. The literature review methodology, including databases searched, search terms and dates, should be detailed. Reviews should normally not exceed 4000 words and should include up to three key message points.

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- Health service effectiveness, management and re-design
- Health protection including control of communicable diseases
- Health promotion and disease prevention
- Critique on public health programs or interventions
- Public health governance, audit and quality
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This is not an exhaustive list and the Editors will consider articles on any issue relating to public health.

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PREVALENCE AND PREDISPOSITION OF SMOKING AMONG THE FEMALE UNIVERSITY STUDENTS OF ISLAMABAD, PAKISTAN

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Abstract

Background: Women, like men, from both lower and upper social class of the society do smoke. Our study tries to calculate prevalence of cigarette smoking among female university students in Pakistan. The objectives of this study were to (a) determine the prevalence of smoking, and (b) to assess predisposing factors for smoking among female university students.

Methods: We used mixed methods for this cross sectional survey. Both the public and private universities in Islamabad were included completing a sample size of 969 respondents. We conducted Focus Group Discussions followed by face to face interviews with semi-structured questionnaire.

Results: We calculated prevalence of ever-smoked female university students at 12%. Anti-smoking campaigns could outreach 20% of the respondents. A quarter of the respondents could list more than three hazards of smoking. Ever smokers were predominantly present in the first year (36.1%) and the fourth year (35%) of the university. More than a third of ever smokers were from a monthly average household income of US$ 600-1000. Mean age at trying smoking for the first time was 16 years with a standard deviation of +4.40. Respondents having smokers as their friends were 2.5 times more likely to develop smoking habits compared to non-smokers (p value =0.000, CI: 2.085-2.977), and having no friend who smoked had an odds of 0.498(p=0.00 CI: 0.393-0.631). Despite of being aware of the hazards and consequences of smoking, they still smoked.

Conclusion: Prevalence of smoking among educated women in the universities of the capital of Pakistan is relatively high, with a start at a younger age having friends who smoked. (Pak J Public Health 2014; 4(3):1-7)

Keywords: Smoking, women, education, university, prevalence, Pakistan

Introduction

Smoking is one of the leading causes of preventable deaths worldwide (1). Nearly six million people die each year because of the tobacco use (2). According to the World Health Organization’s (WHO) estimates, this figure could reach up to eight million by the year 2030. Currently, there are about 1.3 billion smokers in the world, and each day about 9,900 young people start to smoke (3). Globally, 40% of the men and 9% of the women smoke (4). In a survey conducted by the WHO in 151 counties, half of the youth was found using tobacco. Men and women use tobacco for different reasons. Women are prone to health risks such as infertility, delay in conceiving, at risks pregnancy and premature delivery; reduction of breast milk, and exposure to cancer. Most deaths are seen in women with a low socio economic status. (4).

Smoking has generally been taken as a male activity. In many developing counties gender roles for men are defined in such a way that smoking is associated with masculinity, independence and power (5). The report “Gender, Women, And The Tobacco Epidemic” by the WHO (6) draws attention to the fact that the younger you begin to smoke, more are the chances of becoming a habitual smoker. Taking gender into consideration, the report shows that women with more spending money and less education are more likely to use tobacco.

Although the prevalence of smoking in women is lower than males in Australia, it is observed that the rates for men have decreased since 1945 (from 72% to 32%), while the rates for women have not (26% in 1945 to 25% recently) (7). In a study on European women it was seen that friends had major influence on initiation of smoking, and being older or divorced was also associated with smoking (8). A study on Portuguese students revealed that although most students started to smoke in school, 34% of the women started to smoke at the university (9). Among European countries, Sweden has the highest number of women who start smoking at an early age (8). Women smoke as much as the men do in some of the Scandinavian countries and in New
A study conducted in Seoul revealed that smoking was more common in women with lower socioeconomic status. Initiation was higher among women who performed manual work with less chances of giving-up (11). In Egypt, 2.2% of female university students were found to be smokers (12), influenced by friends to smoke and began smoking at an age around 20 years. In Dammam, Saudi Arabia, 8% of college students were found smokers (13). There, most women, motivated by curiosity, started at a mean age of 16 years (44%) and less for stress relief (26%) (13). In Nepal, 18% of the young females tend to smoke, and their main reason for smoking is for relaxation, or to feel grownup (14). In Iran, smoking water pipes is equally popular among women and men (15). Among South Asian countries, Nepal has the highest number of women who smoke (18%) (14), whereas, the prevalence of smoking among Indian women is far less (3%) (16).

In Pakistan, 36% of men and 9% of women smoke (17). Smoking is more common among older women belonging to low socio-economic groups (18). With increasing trends of smoking among women in developing countries, similar assumptions can be made about women in Pakistan. Smoking has been well researched in Pakistan but most of the studies had been on men. For studies on women, it is observed in Karachi that women above the age of 30, married and living in a joint family are more likely to consume tobacco (18).

Being illiterate and having a household income of more than 5000 rupees, was a likely reason for tobacco consumption as well (18). In a study in 2008, 10% of the women, between the ages of 18 - 24 years, from rural Sindh, were reported to be smokers (19). In 2005, a follow-up study on university students of Peshawar revealed that smoking among female university students increased from 1% to 5% in five years (20). In a more recent study, it was seen that medical students smoke because of the influence of western culture, for stress relief and due to advertising.

Tobacco smoke causes significant number of deaths (21). Approximately six million people die each year because of the tobacco use (2). By the year 2030, World Health Organization (WHO) estimates that this figure may touch the eight million mark with a current estimate of about 1.3 billion smokers in the world (3). Apart from the youth, both the adult males and females are exposed to the risk of tobacco use. In general, worldwide, 40% of men and 9% of the women do smoke. Mortality due to tobacco use is more among the low socio-economic groups (4).

There lived 1.1 billion smokers, more than 15 years of age, in Low and Middle Income Countries (LMICs). Most of them were in the age group 30-49 years (22). In the Eastern Mediterranean Region (EMR), cigarette consumption in terms of million sticks have increased since 1970 (89, 952) to 2000 (255, 519) (23). More than a decade ago, the estimates showed prevalence of smoking in males to be 36% and among females to be 9% (24). However, later studies with relatively smaller sample sizes showed that about 33% of males and 4% of females used tobacco on daily bases. Being poor, living in rural area, having less education, and being a male are the factors increasing risk of a person to tobacco use. Persons addicted to tobacco use more frequently do cigarette smoking (68%), and expose others to Environment Tobacco Smoke (ETS) (56%) (25). The exposure to second hand smoke in pregnant women in Pakistan is alarmingly high (91.6%) (26). Among adults, prevalence of water pipe smoking in Pakistan is 6% (27). Smokeless tobacco (SLT) is also being used widely. In some ethnic communities (Pathans and Muhajirs), particular smokeless tobacco use is quite high (28). The usual SLTs are snuff (naswar), betel quid (paan) with tobacco, and betel nuts with tobacco (gutka) (29). The common perception about other Potentially Reduced Exposure Products (PERPs) told be safer than the cigarette itself, can be dangerous as “there is no such thing as safe tobacco product”. (30).

According to some reports, in Pakistan, 36% of men, and 9% of women do smoke (17). These figures cannot be considered authentic until robust study methods matching international standards are applied. A recently published analysis of Global Adult Tobacco Survey (GATS) household survey from 16 countries has compared GATS figures from developing countries. Pakistan, unfortunately could not be compared due to absence of the country’s own GATS data (31). The figures are higher for other neighbouring and developing countries than the ones shown by small studies from within Pakistan. Internationally comparable data from Pakistan are required on 15 indicators of the GATS household survey in order to have information on both smoke and smokeless tobacco so that future preventive measure are based on good evidence. The main drivers for smoking in Pakistan are believed to be peer pressure and stress reliever (32). Among medical students in Lahore, the rate of smoking for female students was 13.45%. Majority of those smokers were between 21 - 30 years of age (male and female combined). Most of the students who smoked, were from a higher social class, and were influenced by their friends (33) In Peshawar, 5% of female university students were smokers, and about 87% had more than one smoker in the family (20). Studies from the rural Sindh show that 10% of the women were smokers and they started at 18 - 24 years of age, and the trend was increasing (19). Another study from Karachi revealed that 26.7% of male school students had ever tried smoking, and the smokers were five times more likely to have friends who smoked (3).
We conducted this study because there is an increasing trend of smoking being observed among young people in Pakistan. Female university students from higher socioeconomic groups are in better position of making choices for their social life and health than the young women from other socioeconomic groups in the country.

Objective
The objectives of our study are to (a) determine the prevalence of smoking among female university students, (b) identify factors associated with smoking among female university students, and (c) describe perceptions of female university students regarding smoking.

Methods
We conducted this descriptive cross sectional survey during May to July 2012, among recognized Universities in Islamabad, Pakistan. We estimated a sample size of 1,118 on OpenEpi and increased it by 10 % to 1,230 to compensate missing data. We used convenient sampling method. We included all female university students, willing to participate in the study, and excluded women who were non-Pakistani, were from a medical background, or studying any other healthcare discipline. We could get a total of 1,037 questionnaires completed.

This study had permission from the Institutional Review Board of the Health Services Academy. The tools were pre-tested. We obtained permission from the concerned officials of each university. We hired female data collectors to collect data. Data quality was ensured by strict monitoring and cross-checking. Right of anonymity of respondents and confidentiality of information was ensured. Respondents had the right to quit at any stage of the study. Overall refusal rate was 16%. Data was cleaned, entered into SPSS version 16 and analyzed for variable of interest. We piloted the questionnaire and adjusted questions for their reliability. We obtained frequencies and percentages against each variable, and cross tabulated "ever smokers" to variables of interest. We applied Chi square for strength of association by obtaining odds ratio.

Results
We found a prevalence of 12.38% of "ever-smoked" female university students in Islamabad, Pakistan. Multiple factors were examined and it was seen that monthly average household income, mode of payment of tuition fee, having family members and friends who smoked and year of study, among others, were associated with ever smoking(figures 1-5).
Figure 5: Ever Smoking and Friends Who Smoke

Anti-smoking campaigns were only able to reach 20% of the respondents. A large number of the respondents were aware of the hazards of smoking. Majority of them could list more than three hazards (table 1).

Table 1: Number of hazards of smoking listed by the respondents

<table>
<thead>
<tr>
<th>Number of Hazards Listed</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24</td>
<td>2.5</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>1.5</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>1.3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>0.5</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>0.2</td>
</tr>
<tr>
<td>9</td>
<td>849</td>
<td>87.6</td>
</tr>
<tr>
<td>Total</td>
<td>932</td>
<td>96.2</td>
</tr>
</tbody>
</table>

Mean age of the respondents was 20.85 years with a Standard Deviation of ±1.87. Majority of the university students (72.1%) were between the ages of 20 - 24 years. This was also the age group with the most ever smokers (87%).

Most of the students were residents of Islamabad and Punjab, and 80% commute daily to their University. Although this study was able to capture students of diverse ethnic backgrounds, Punjabis were the majority followed by Urdu speaking.

From a wide variety of subjects being taught at the twelve universities, most of the respondents were from Bachelors of Business Administration (23.7%). Other significantly prominent courses of study were; Bachelor in Software Engineering (8.5%), Masters in Business Administration (6.4%), Master of Sciences in Economics (4%) and Bachelor of Sciences in Computer Sciences (3.8%).

Among all the students, 38% belonged to the first year. It was seen that ever smokers were predominantly present in the first year (36.1%) and fourth year (35%). Association between the year of study and ever trying smoking was significant after applying Chi square (table 2).

Table 2: Association between Respondents' Year of Study and Ever Trying of Smoking

<table>
<thead>
<tr>
<th>Year of the Study</th>
<th>Ever Tried Smoking</th>
<th>Total/Percent</th>
<th>Chi Sq</th>
<th>DF</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>43</td>
<td>323</td>
<td>366/38.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd</td>
<td>21</td>
<td>231</td>
<td>252/26.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td>14</td>
<td>112</td>
<td>126/13.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4th</td>
<td>41</td>
<td>171</td>
<td>212/22.2%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Payment of university fee was made by parent or husband (90.2%), a guardian (2.6%), and 2% of the students paid for their studies themselves. Students on scholarships were 4.4%. Method of payment of fee and monthly average house hold income was also significantly associated with ever smoking. Thirty five percent (35%) of the ever smokers were from a monthly average household income of 61,000 - 100,000, 31% belonged to 21,000 - 60,000 and more than 101,000.

Eighty three percent (83.9%) of the students were single, 12.2% engaged, 3.4% married and only 0.5% were divorced. Although 80% of ever smokers were single, a relationship was not present between ever smoking and marital status.

More than one third of the university students recalled that their earliest memory of seeing someone smoking was that of a relative, and 12.5% remembered that person to be their parent. 69.24% of ever smokers had a current smoker in their family.

Twelve percent (12.4%) of the respondents had ever tried smoking a cigarette. Mean age at the first time trial was 15.97 with a standard deviation of ±4.40. The youngest age was 3 years, and the oldest 23 years. The usual reason stated for trying smoking was “to see what does it taste like” (61.6%). Almost 10% of the students smoked for the first time because a friend asked them to smoke, 2.7% did because they were impressed by a family member, 3.6% liked the act of smoking, 5.4% wanted to relieve stress, and 1.8% wanted to lose weight. 53.3% only tried smoking once and did not continue the habit, while 25.2% continue to smoke once in a while or on special occasions. 6.5% smoked sometimes but not daily. 5.6% were daily smokers who smoked at least one cigarette every day. About 48.3% of smokers borrowed cigarettes to smoke and 24.1% bought them by themselves. 12.1% gave money to someone to buy cigarettes and 15.5% got their cigarettes some other way. It was seen that there was a likelihood of having friends who smoked and ever smoking, and that smoking was usually done with friends 40.4% of the time and 22.8% at home.

About 30% of all the respondents had friends who smoked and that percentage was 63% among ever smokers. Ever smokers were five times more likely to have had a friend who smoked compared to
nonsmokers (OR: 5.022, CI: 3.352-7.523). Ever smokers having male cousin who smoked, had relatively stronger association and were at 1.7 time higher risk of being smokers (OR: 1.77, CI: 1.130-2.790).

During the past 30 days, 86.2% of the women came across a smoker, 41.5% of those smokers were at the university. Contact with a smoker at home was 10%. Only 20.7% of the students had come across an anti-smoking campaign, while 48.7% were exposed to advertisement for cigarettes. On the other hand, being ever smokers visiting a shop that sold cigarettes, had an association (table 3).

Table 3: Association between being Ever Smoker and Visiting a Cigarette-selling Shop

<table>
<thead>
<tr>
<th>Have been to shops that were selling cigarettes in past 30 days</th>
<th>Ever Tried Smoking</th>
<th>Total/Percent</th>
<th>Chi Sq</th>
<th>DF</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>84</td>
<td>534/55.9%</td>
<td>11.872</td>
<td>1</td>
<td>0.001</td>
</tr>
<tr>
<td>No</td>
<td>35</td>
<td>421/44.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>119</td>
<td>212/22.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When asked, 88.2% of ever smokers were aware of hazards of smoking. None of the ever smokers associated hazards of smoking during pregnancy or of secondary smoke on children. More than half of the ever smokers wished to quit smoking and 62.1% had been counseled by a friend (46.3%) or a parent (24.1%).

The main reasons for not being a smoker was health (61.1%). Three percent 3.7% of non-smokers thought that smoking was waste of money, 2.9% were afraid of their parents or husband, and only 9.8% consider it culturally bad. Among the non-smokers, 76.4% would definitely not want to try smoking a cigarette. 89% of the respondents said that they would not smoke if a friend asked them to try it. On the other hand, 41% of the non-smokers considered it easy to get cigarettes if they ever wanted to smoke.

Discussion

The prevalence of ever smokers in the universities of Islamabad was found to be 12.3%. This was somewhat similar to the number of female students in medical college in Lahore(13.45%) (33). Although regular smokers among university students are less than the national average of 9% (smoking in women) (17) this prevalence of ever smokers is higher than expected. More than half of young women, who try out smoking, do not continue to smoke regularly; only 5.6% continue to be regular smokers. As seen from previous studies, ages from 20 - 24 years are common for women who tend to smoke(12,19). Most of the ever smokers wanted to see what it tastes like. 10% has smoked on request of a friend. Smoking does revolve around friends and half of the women borrow cigarettes from others. Among the smokers, 63% had other friends who also smoked. This was similar to a study from Europe where smokers were influenced by friends (8). Smokers were five times more likely to have had friends who smoked, which matched a study on boys from Karachi (3). It was also interesting to note that first year students and final year students are the ones who smoke the most similar to Portuguese students who also initiate smoking at the university (9). This may be due to new found freedom for newcomeers to the university, and age and rebellion for the older group. The affluent class also brings opportunities for women to smoke as they get more freedom and independence. But literature shows that smoking among women in Pakistan is more common in lower socio-economic groups (11,18). Alarmingly enough, 70% of the women had family members who were smokers. In addition most of the exposure was seen at universities, even though most universities claim to be no smoking campuses. There was a wide gap between seeing advertisements for cigarettes and coming across anti-smoking campaigns. Nevertheless these campaigns have been successful, even if in part, of making it common knowledge that smoking causes lung cancer and other diseases. Culture, as one would expect, was not a major deterrent for smoking among women. Interestingly it was health. Culture rated at only 9.8%. But most women agree to the fact that it was not acceptable for women to smoke in their society, especially in public. Western culture is almost always to be blamed. Smoking among women does not signify confidence or popularity, and is thought to be harmful to health.

Limitations

During this study there were limitations of time and resources. This study looks only at cigarette as a mode of tobacco use. Most data was analyzed with regards to ever smokers. Although initially planned, random sampling was not possible because of the perceived stigma associated with women smokers in public. This study does not take into account low self-esteem and depression, along with other psychological factors associated with smoking among women.

Conclusion

Baseline data from Islamabad was limited before this study. This study highlighted that ever smoking among women is at 12.3% among female university students of Islamabad, which is more than expected. Mean age of initiation is about 16 years. In addition, most of the interaction with smokers is at universities. Friends have a major role to play when it comes to smoking, and as demonstrated, most of the smoking is done with friends around. As previously thought, culture and constraints of society may not be adequate in the coming years to be an adequate deterrent for smoking among women.
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MOTIVATIONAL LEVEL OF MALE AND FEMALE LECTURERS AND ASSISTANT PROFESSORS IN A PRIVATE INSTITUTE OF MEDICAL SCIENCES IN PESHAWAR, PAKISTAN

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Abstract

Background: Human resource is one of the most valuable assets of organizational resources which cannot be replaced by machines. Organization can achieve its objectives only by making use of all of its human, physical and financial resources and it's through these resources the employees of an organization gets motivated. Motivation is a complex phenomenon which is difficult to measure as it varies different for different people. Health profession is considered as one of the most stressful profession in Pakistan and to provide quality of health care service delivery and education it is important that health service provider should be satisfied and motivated with his job.

Method: The objective of this study was to find the motivation level of lecturers and assistant professors and to compare the motivational level of male and female lecturers and assistant professors in a private institute of medical sciences in Peshawar, Pakistan. Random sampling using "pick from hat" method was done and 60 participants of both gender were interviewed (15 lecturers and 15 assistant professors) using a De Beer questionnaire on motivation and satisfaction.

Results: It was found that overall the staff (lecturers and assistant professors) was motivated; however, the mean value of work content was lower which indicates that the staff was neither motivated nor de-motivated. P-value for lecturers was found to be 0.525 whereas p value calculated for assistant professors was 0.0437.

Conclusion: Overall motivation was good. There was no difference in motivation of male and female lecturers but female assistant professors were more motivated than male assistant professors. (Pak J Public Health 2014;4(3):8-13)

Keywords: Lecturers, Motivation, Assistant professor, Medical University, Peshawar

Introduction

Human resource of an organization plays a vital role in the profitability of an organization, therefore is considered as a valuable asset of all the organizational resources. The skills, knowledge, expertise and experience cannot be replaced by replacing by machines. Organizations nowadays are giving competitive edge by meeting the employee's expectation and providing an atmosphere where employee feels satisfied. Hiring and recruitment of staff is not only a complex procedure but is also associated with high cost. In today's high-tech and fiscal competing world retaining an employee is a challenge for the survival of an organization (1). Loss of trained human resource from rural to urban, public to private and developed to industrialized countries has been seen (1). Satisfaction of job is difficult to explain and varies different for different people. Organizational success relies on the contribution of the employees which in turn is determined by the individual characteristics and those aspects of work environment that motivate an employee to invest all his/ her physical and mental energy in his/ her work to met organization objectives The success of an organization is heavily dependent on the employee contribution which in turn is determined by an individual employee characteristic and the environment that motivates him/ her to spend all his energy in achieving the organizational goals (2). Motivation is a complex phenomenon which varies from person to person. It starts with a dire need which guides to a contemplation process and changes an employee behavior or guides his decision to satisfy the need by following a course of
Motivating employees to be fully committed and engaged in achieving the organization goals could be challenging. A drop in motivation has deleterious effects on organizational health. A study conducted in Africa shows that low motivation in workers is associated with poor performance and it adds to push factors for migration of health worker (1,3). Identifying the factors that cause lack of motivation could not be generalized to all the employees. It is important to identify the factors degrading motivation and design the motivational strategies to kill these productivity hindrances. Research conducted in Mali to find motivating and de-motivating factors in health service providers found that the main motivators of health workers were related to responsibility, training and recognition, next to salary (4). A survey conducted in United States on non-salaried physician teacher of internal medicine, family medicine and pediatrics focusing on teachers' evaluation of rewards or incentives offered by the programs found that the educational opportunities received high rating especially in the context when school bore the cost of providing service (5). Another study conducted on primary care clerkship preceptors at Harvard Medical School (1997-2006) to examine the effect of increase in payment for teaching on retention of primary care faculty members found that retention rates varied from high of 91% in 2006 to a low to 69% in 2000. Faculty was 2.66 times more likely to return to teach in the highest pay period than the lowest, faculty receiving direct payment were more likely to continue teaching than those receiving it indirectly (6).

Health profession is one of the most stressful professions considered in Pakistan where junior doctor despite of massive work load are paid less (7) In a study focusing on factors motivating clinical teachers in Sports Medicine School showed that 72% of the participants were of the opinion that "I teach for helping other" while 28% were of the opinion that "I teach for improving myself"(8). Similarly in another study conducted on junior and senior faculty in Radiology department found that academic radiologists were very happy with work. The working week was not regarded as too hectic. More than two third time of academic faculty was used in clinical practice. Fifty five percent of faculty were having mentors and out of these 57% receive adequate mentoring, when it comes to teaching 50% of senior faculty has enough time to teach juniors (9). A study conducted in Bangladesh showed that it's not only work but several other motivating factors to satisfy the present executives. Both male and female executives confirmed that their companies recognize good work, have clear organizational goals, higher level of agreement about liking of coworkers, suggesting less gender discrimination, though they mildly agreed that there is bickering and fighting at work (10). A mixed-method study conducted by Chandler in Tanzania on clinicians found that higher salary was associated with internal motivation and amongst higher earners motivation was also associated with higher qualification and salary enhancements (11). Similarly in another study conducted in Liberia and Vietnam using a discrete choice experiment found that in Liberia most powerful single incentive health workers motivation was increased salary while long term education was considered a motivating force in Vietnam (12). Study conducted on developing the motivation for improving university teaching shows that faculty showed their utmost concern in improving their skills and desire for continuous education (13). In another research by Bishay who examined the levels of job satisfaction and motivation in 50 teachers and found that for the teacher's group working with a selective student body in a school motivation and satisfaction at job levels were high(14).

One finds limited research on motivation of faculty working in private sectors and hardly finds any study conducted on motivation of male and female lecturers and assistant professors in Khyber Pakhtunkhwa, Pakistan. One reason of conducting the research was that it could benefit the private institute of medical sciences in the sense of job motivation and thereby to raise the quantity and quality of the work. The study was conducted to identify the motivation levels of lecturers and assistant professor and to compare motivational level of lecturers and assistant professors working in a private institute of medical sciences at Peshawar, Pakistan.

Methodology
The descriptive cross sectional study was carried out in a private institute of medical sciences at Peshawar from June until July, 2014. The data was primary data which was collected from employees of a private institute of medical sciences (lecturer and assistant professors). Only those participants who were having a valid Pakistan Medical and Dental Council (PMDC) registered MBBS/ BDS degree were included in the study. For this study De Beer (1987) questionnaire on satisfaction and motivation was used and only four dimensions; work content explored the participants "feeling about the type of work", working condition probed the "opportunities to mix with colleagues and interpersonal relations, personal explored the "feeling towards the job" and supervision assessed the level of satisfaction with their head of departments (15).

The tool was used to determine the motivation of 1373 employees working in large life insurance organization in the Western Cape, South Africa (15). The reliability and validity was done and the item analysis to evaluate the inter-item consistency of the questionnaire provides an indication of the consistency
of responses to all items outlined; the Cronbach-Alpha reliability for the work content is $r=0.78$, working condition $r=0.77$ and leader/supervisor is $r=0.72$. Each dimension had a number of responses to which the participant could select the best one. The selected responses were indicated on five point scales (Strongly Agree=5, Agree=4, Neutral=3, Disagree=2, Strongly Disagree=1). A demographic sheet was attached to the questionnaire which included demographic features such as marital status, designation, age, discipline, job specification and years of experience.

Data was collected by a team of enumerators. The enumerators were given a one day orientation session and ethical consideration was briefed to them. Verbal consent was taken from participants and they were briefed on ethical consideration of the research which was that the data would be used to have an overview of motivational level of university's employee; confidentiality of the respondent will be maintained, the data will be presented as a group data. The enumerators interviewed the respondent based on questionnaire. Privacy was provided to the respondent so that he can feel free to share their views. Sample size was 60 [30 lecturers (fifteen males and fifteen females) and 30 assistant professors (fifteen males and fifteen females)]. Respondents were selected based on random sampling using lottery method "pick-from hat" in each cadre (lecturer and assistant professors) of the private institute of medical sciences.

Data was analyzed in SPSS using version 17. Double entry and cross check was done to make sure that the data was free of errors. Descriptive statistics were used to analyze the data. T test was done to find the p value and statistical difference among groups.

Results:
The descriptive analysis was done in the form of arithmetic mean and standard deviation of the overall motivation and satisfaction followed by inferential statistical analysis. Table 1 indicates that means for the work content, working condition, personal and supervisor ranged from a low of 3.97 to a high of 4.38. It appears that staffs interviewed were motivated; however, the mean value of work content was lower which indicates that the staff was neither motivated nor de-motivated as determined by work motivation and satisfaction questionnaire.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work content</td>
<td>3.97</td>
<td>0.609</td>
</tr>
<tr>
<td>Working condition</td>
<td>4.03</td>
<td>0.635</td>
</tr>
<tr>
<td>Personal</td>
<td>4.38*</td>
<td>0.552</td>
</tr>
<tr>
<td>Leadership and Supervisor</td>
<td>4.27</td>
<td>0.6929</td>
</tr>
</tbody>
</table>

* Where high variables correspond to high motivation

With respect to dimensions of work motivation assessed by work motivation and satisfaction questionnaire, Figure 1 compares the mean for work motivation and satisfaction among male and female lecturers. It can be seen that both male and female lecturers were motivated and satisfied with all the dimensions as determined by work motivation questionnaire except work content, in which they were neither motivated nor de-motivated.

Figure 1: Dimension of work motivation and satisfaction in Lecturers of a private institute of medical sciences at Peshawar, Pakistan

Figure 2 compares the dimension of work motivation of male and female assistant professors; it is evident from the figure that female assistant professors were motivated in all dimensions of work motivation and satisfaction questionnaire whereas male assistant professors were neither motivated nor de-motivated when asked about working condition and work content.

Figure 2: Dimension of work motivation and satisfaction in Assistant Professors of a private institute of medical sciences at Peshawar, Pakistan
Discussion

Study conducted on teachers motivation and job satisfaction in senior high school in the Tamale metropolis of Ghana shows that working condition was rated as mean ranking of motivation in order of performance while supervisor and headmaster was rated in last (16). Though we looked at only four dimensions of motivation and found that working condition was rated second and leadership and supervisor was last in terms of satisfactory factors which is quite similar to our finding. The study also found that teachers in Ghana were not satisfied with working condition with a mean value of 2.80 (2.00-2.99 = dissatisfied) but were satisfied with supervision; mean value 3.89 (3.1-3.99 = satisfied). When compared with our study the respondents were satisfied with working condition, mean value 4.03 and supervision (mean value 4.27). Our finding suggest that male and female lecturers appeared to have satisfied with all dimensions of work satisfaction and motivation as determined by work motivation questionnaire except work content, in which they were neither motivated nor de-motivated.

Gupta et al. compared the job satisfaction and work motivation of teacher working in secondary schools with demographic variables. The motivation and job satisfaction were dependent while the independent variables were gender, schools type, teacher's experience, educational qualification. The findings suggested that there was no significant difference between job satisfaction and work motivation of male and female teachers though there was significant difference among teachers working in government and private schools, more experienced and less experienced teachers with respect to job satisfaction and work motivation (17). Another study conducted to identify motivational level of teachers at Secondary School level in Rawalpindi, Pakistan found that teachers were not satisfied with their socio economic status, profession's choice, behavior of student and stress of exam, most of them felt they were underpaid (18).

A study conducted on job satisfaction of secondary school teachers using Minnesota Satisfaction Questionnaire found that female teachers were more satisfied than their male counterparts and generally teachers were less satisfied with compensation, human relation, supervision, advancement and working condition (19). The findings of this study were very much similar to our study in which female assistant professors were motivated in all dimensions of motivational questionnaire. In another study conducted to determine the contributions of background and training, academic productivity, distribution of work time, institutional support, career attitudes and family responsibilities to sex differences in academic rank and salary among faculty members of academic pediatric department in United States found that fewer women than men achieved the designation of associate professor or high cadre. Women in the low ranks were less academically productive and spent significantly more time in teaching and patient care than men in those ranks (20).

To compare motivation in male and females Lecturers and Assistant Professors motivation t Test was performed. For Lecturers critical t-value calculated was 2.144787 while t-value is 0.844057 (Table 2). So the t-value is less than the critical t-value, therefore the difference in motivation of male and female lecturers is not significant. Hence we can say that there is no motivational difference between male and female lecturers.

<table>
<thead>
<tr>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.087179</td>
</tr>
<tr>
<td>Variance</td>
<td>0.049972</td>
</tr>
<tr>
<td>Observations</td>
<td>15</td>
</tr>
<tr>
<td>df</td>
<td>14</td>
</tr>
<tr>
<td>t Stat</td>
<td>0.844057</td>
</tr>
<tr>
<td>P(T&lt;=t) one-tail</td>
<td>0.206414</td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.76151</td>
</tr>
<tr>
<td>P(T&lt;=t) two-tail</td>
<td>0.412828</td>
</tr>
<tr>
<td>t Critical two-tail</td>
<td>2.144787</td>
</tr>
</tbody>
</table>

Similarly for Assistant Professors s specified in Table 3 below the critical t-value was 2.051830516 while t-value is 2.12865091. So the t-value is greater than the critical t-value which clearly indicates that the motivation level is different and the test is significant (P-value 0.04 which is less than 0.05).

<table>
<thead>
<tr>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.120512821</td>
</tr>
<tr>
<td>Variance</td>
<td>0.063792618</td>
</tr>
<tr>
<td>Observations</td>
<td>15</td>
</tr>
<tr>
<td>df</td>
<td>27</td>
</tr>
<tr>
<td>t Stat</td>
<td>2.12865091</td>
</tr>
<tr>
<td>P(T&lt;=t) one-tail</td>
<td>0.01278194</td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.703288446</td>
</tr>
<tr>
<td>P(T&lt;=t) two-tail</td>
<td>0.042556388</td>
</tr>
<tr>
<td>t Critical two-tail</td>
<td>2.051830516</td>
</tr>
</tbody>
</table>
Limitations
There are several dimensions of motivation. This study was focusing on only four dimensions work content, working atmosphere, personal, leadership and supervisor. Similarly the finding of this study could not be generalized. Also the study was done on a small scale would have low external validity. The study was conducted in a private institute of medical sciences and the results were not compared with any other private or public medical university, so one cannot attribute the finding to the entire medical faculty.

Conclusion
Based on our finding we conclude that overall male and female staff (lecturers and assistant professors) was motivated on the three dimensions (working condition, personal and supervisor) of work motivation and satisfaction questionnaire. No difference in motivational level of female lecturers was found however there was a motivational difference between male and female lecturers. Female assistant professors were more motivated than male assistant professors working in the institute of medical sciences.

Recommendations
There are several dimensions of motivation. This study was focusing on only four dimensions work content, working atmosphere, personal, leadership and supervisor. Similarly the finding of this study could not be generalized to medical faculty as it was focusing on a single private medical college. Cross comparison with other private and public university is suggested. We recommend based on our findings to explore other dimensions of motivation in medical faculty and comparing the findings with public sector. "This publication reflects the personal opinion of the authors and not of the organization".

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A STUDY OF POST-TRAUMATIC STRESS DISORDER IN INTERNALLY DISPLACED PERSONS (IDPs) IN LAHORE CITY

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Abstract

Objectives: The objectives of the study were to assess post-traumatic stress disorder (PTSD) in Internally Displaced Persons and to enlist the factors precipitating post-traumatic stress disorder in IDPs.

Methodology: It was a descriptive, cross-sectional study. Study population was Internally Displaced Persons (IDPs) residing in the city of Lahore. Data was collected by the non-probability convenience sampling through structured questionnaire. Collected data was analyzed through Epi Info 6 programme and appropriate statistics were applied.

Results: 42(44.9%) females were diagnoses with PTSD as compared to males 36(33.66%). 51(47.6%) respondents who diagnosed with PTSD were between 18-40 years and 27(31.8%) were 41 year old and above. 65(38.7%) had up to 10 family members and 13(54.1%) had more than 10 family members. 44(46.3%) had lost their properties and 28(70.0%) had lost their close family members, all were diagnosed positive for PTSD.

Conclusion: Majority of the respondents were married and belonged to urban area. More than 75% of respondents did not receive any kind of medical care as well as psychological care after displacement by government, NGO and charity. (Pak J Public Health 2014;4(3):14-18)

Key Words: Internally displaced person, Post traumatic stress disorder

Introduction

Post-traumatic stress disorder (PTSD) is a very strong stress reaction that can develop in people after a traumatic event. Usually it involves directly experiencing the event, such as a serious car accident, a natural disaster like an earthquake, personal assaults and abuse, terrorist attacks and military combat. Any type of personal or environmental disaster or being threatened with an assault can lead to PTSD. Usually that's because of the intensive feelings of fear, helplessness, or horror that goes with these things. It's normal to be super-stressed after going through something traumatic. Strong emotions, jitters, and trouble sleeping, eating, or concentrating may all be the part of normal and temporary reaction to an overwhelming event. So might frequent thoughts and images of what happened, nightmares, or fears. (1).

In the 1980s the term Post Traumatic Stress Disorder (PTSD) was introduced (2). The concept of psycho-trauma in development of psychiatric disorders has been in vogue in psychiatry, in the last few decades (3). The recent interest in PTSD, started with the Vietnam Veterans in USA. The veterans, displayed a characteristic array of symptoms, which needed a diagnostic category, this led to the impetus for the development of PTSD. Since that time, there is increasing recognition that adults and children can develop severe and debilitating reactions to traumatic events (4).

The three groups of symptoms that are required to assign the diagnosis of PTSD are: firstly, recurrent re-experiencing of the trauma (for example, troublesome memories, flashbacks that are usually caused by remainders of the traumatic events, recurring nightmares about the trauma and/or dissociative reliving of the trauma). Secondly, avoidance to the point of having a phobia of places, people, and experiences that reminds the sufferer of the trauma and a general numbing of emotional responsiveness. Thirdly, chronic physical signs of hyper arousal, including sleep problems, trouble concentrating, irritability, anger, poor concentration, blackouts or difficulty remembering things, increased tendency and reaction to being startled, and hyper vigilance to threat. (5).

Trauma-Focused Cognitive-Behavioral Therapy, EMDR (Eye Movement Desensitization and Reprocessing), Family Therapy and Medication are the types of treatments PTSD. (6) Many countries have significant IDP populations like Azerbaijan has 686,586 IDPs as a result of the Nagorno-Karabakh War, Somalia has over a million IDPs due to the civil war, Afghanistan has 132,000-200,000 IDPs, mostly in the south and
west parts of the country due to fighting between NATO and Taliban-allied fighters and Kenya has 250,000-400,000 IDPs due to the violence that rocked the country after the 2007 elections. Pakistan has more than 400,000 IDPs at the end of 2008 due to ongoing conflicts in three regions of Pakistan. Currently one million people have displaced in NWFP province due to military operation. (7)

According to BBC, internally displaced people in a camp near Lahore in May 2009, hundreds of thousands of people were displaced as a result of conflict in Swat (8). Uncertainty exists in all aspects of the lives of those uprooted and displaced by fighting between Pakistani government forces and the Taliban in northwestern Pakistan. They question when they can return to their homes and what will happen when they do. With each passing day, displaced persons wonder how long host communities can continue to support them. Even those who received relief items wonder for how long they can sustain their families without jobs or money. For many of the uprooted, uncertainty is the real crisis they face. Since the beginning of the recent flux of displaced people in Pakistan, organizations including Church World Service identified the need for the psychosocial support. Doctors report that 70 percent of internally displaced persons (IDPs) suffer from post-traumatic stress disorder (PTSD). While one humanitarian organization says 85 percent of its patients are suffering from anxiety, depression and trauma (9).

Methodology
This descriptive cross sectional study was conducted in the city of Lahore, Pakistan from 18 July 2009 till 17 August 2009. The study population was Internally Displaced Persons (IDPs) residing in the city of Lahore. Post-Traumatic Stress is more common in Internally Displaced Persons (IDPs). In Pakistan majority of children, youth and women were traumatized by the ongoing conflict between the Taliban and the armed Forces in FATA (the Federally Administered Tribal Areas) and other areas of NWFP (the northwest frontier province of Pakistan). A few studies have been conducted on this topic worldwide but sufficient data is not available. This is one of the important and interesting topics to ascertain PTSD in internally displaced persons.

No sufficient data is available in Pakistan regarding IDPs especially of Swat area. Diagnosing high risk patients, creating awareness for its treatments, recovery and improving psychological health of IDPs by identifying factors complexing PTSD are the main scope of the study. The objectives of the study were to assess post-traumatic stress disorder in Internally Displaced Persons (IDPs) and enlist the factors precipitating post-traumatic stress disorder in Internally Displaced Persons (IDPs). A predesigned questionnaire was used to collect the data. First part of the questionnaire belongs to the demographic information and second part of the questionnaire has diagnostic tool for post-traumatic stress disorder. Second part of the questionnaire is divided into four categories based on the diagnostic tool of PTSD that is Traumatic events, Re-experiencing symptoms, Avoidance symptoms and hyper arousal symptoms. Non-probability convenience quota sampling technique was used in this study. Adult displaced from their places of origin (Swat) and temporarily residing in the camp located at Budhu Da Aava near UET University, Lahore were included and persons less than 18 years of age were excluded from the study. Formal consent and permission were taken from concerned authority to conduct the study. Verbal consent was taken from respondent. Collected data was analyzed through Epi Info 6 programme and Chi-square test was applied to check the significance and relationship against p-value between PTSD and precipitating factors of present study. A total of 192 people were interviewed.

Results
The record composed from the study as show in Table-1

Table 1: Frequency Distribution of characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Respondents (N= 192)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>107 (55.7)</td>
</tr>
<tr>
<td>Female</td>
<td>85 (44.3)</td>
</tr>
<tr>
<td>Age (Years)</td>
<td></td>
</tr>
<tr>
<td>18-40</td>
<td>107 (55.7)</td>
</tr>
<tr>
<td>≥ 41</td>
<td>85 (44.3)</td>
</tr>
<tr>
<td>Monthly Income (RS)</td>
<td></td>
</tr>
<tr>
<td>15000</td>
<td>173 (90.1)</td>
</tr>
<tr>
<td>&gt;15000</td>
<td>19 (9.90)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>36 (18.8)</td>
</tr>
<tr>
<td>Primary</td>
<td>55 (28.6)</td>
</tr>
<tr>
<td>Middle</td>
<td>49 (25.5)</td>
</tr>
<tr>
<td>Matriculate</td>
<td>52 (27.1)</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>127 (66.1)</td>
</tr>
<tr>
<td>Unmarried</td>
<td>38 (19.8)</td>
</tr>
<tr>
<td>Divorced</td>
<td>11 (5.80)</td>
</tr>
<tr>
<td>Widow</td>
<td>16 (8.30)</td>
</tr>
<tr>
<td># of Family Member</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>168 (87.5)</td>
</tr>
<tr>
<td>&gt;10</td>
<td>24 (12.5)</td>
</tr>
</tbody>
</table>
that 107(55.7%) were males while 85(44.3%) were females. The age distribution showed that out of 192 respondents 107(55.7%) were between ages 18-41 and 85(44.3%) of the respondents were aged 41 or above. 173(90.1%) of the respondents monthly income was up to 15000 rupees. 55 (28.6%) of the respondents were primary. 127(66.1%) of the respondents were married and 168(87.5%) of the respondents had up to 10 family members. The respondents who belonged to urban areas were 110(57.3%). 97(50.5%) of the respondents said they have lost their properties and 40(20.8%) of the respondents had lost their close family members. 19 (9.9%) of the respondents had psychiatric history while 60(31.3%) of the respondents had history of previous trauma/accident. Majority of the respondents had no history of physical illness while 39(20.3%) of the respondents had history of physical illness. 144 (75%) of the respondents were not provided the medical care in camps.

The PTSD was used to analyze the stress among the Internally Displaced Persons. From Table-2 42(44.9%) females were diagnosed with PTSD as compared to males 36(33.6%). Gender has positive association with PTSD (P=0.027). 51(47.6%) respondents who diagnosed with PTSD were between 18-40 years and 27(31.8%) were 41 year old and above. Age had the significant association with PTSD.
Responses to disaster have been noted to be predictive of PTSD. Immediate emotion or behavioral symptoms of actual physical illness, belligerence, anxiety, depression, somatization and men showing differently to trauma, with women experiencing more PTSD as men. Gender may respond differently to trauma, with women experiencing more anxiety, depression, somatization and men showing more symptoms of actual physical illness, belligerence and alcohol abuse. Immediate emotion or behavioral responses to disaster have been noted to be predictive of later development of PTSD (10).

When age was analyzed in relation to PTSD, it was found to be statistically significant (p=0.025). PTSD has an important affect on age as documented by studies (12). It was found by researcher that 90.1% respondents’ monthly income was up to 15000 rupees and 9.9% respondent’s monthly income was more than 15000 rupees. Although no one is immune to the likelihood of experiencing a traumatic event, some segments of our society are at great risk for such experiences, as well as for the development of trauma-related psychiatric disorders. These segments have traditionally been categorized as being of low socio-economic status (12). This is in contrast to present study probably due to the fact that almost all the respondents belong to same socio-economic class and there was no comparison group socio-economical available due to the small scale of the study.

Study revealed that 47.2% respondents with PTSD were illiterate while 24.2% had done their matriculation. 40.1% respondents diagnosed with PTSD were married while 52.6% were unmarried and 54.1% respondents had more than 10 family members. Another study also showed that increased exposure to traumatic events, being married, physical disability, illiteracy and advanced age were identified as probable risk factors for mental disorders (11). As far as locality is concerned, researcher found that 41.0% were residing in urban area before displacement while 40.2% were living in rural areas. It was also observed that urban people had more difficulties to cope and live in the camps rather than rural areas’ people (12). Study showed that 46.3% respondents who were diagnosed with PTSD had lost their properties (Table-2). The financial loss plays a vital role in precipitating this problem (12).

Out of 192 respondents 40 lost their family members and 152 respondents did not lose their close family members. This factor was analyzed in relation to the PTSD and it was found to be statistically highly significant (P= 0.000). Hence PTSD is related to the loss of family members [12], 42.1% of the respondents were residing in camps while 40.2% were residing in rural areas. It was also observed that urban people had more difficulties to cope and live in the camps rather than rural areas’ people (12). The financial loss plays a vital role in precipitating this problem (12).

Study revealed that 41.6% respondents with diagnosis of PTSD were provided medical care in camps while 40.2% with PTSD remained in camps without medical treatment as there was no support from government or any other NGO/charity.

Discussion

Post Traumatic Stress Disorder (PTSD) is a very strong stress reaction that can develop in people after a traumatic event. Usually, it involves directly experiencing the event, such as a serious accident, a natural disaster like an earthquake, personal assaults and abuse, terrorist attacks and military combat. Any type of personal or environmental disaster or being threatened with an assault can lead to PTSD (1). Several studies have suggested that women are more affected by disaster than men. An assessment of 182 direct victims of the Oklahoma City Bombing six months post disaster found that female gender predicted post disaster psychiatric diagnosis, with women having twice the rate of PTSD as men. Gender may respond differently to trauma, with women experiencing more anxiety, depression, somatization and men showing more symptoms of actual physical illness, belligerence and alcohol abuse. Immediate emotion or behavioral responses to disaster have been noted to be predictive
Conclusion
Another study reveals a higher frequency of war-related traumatic event in IDPs than in non-displaced people, greater suffering from post traumatic stress and more negative beliefs about future reunion [13]. The present epidemiological study indicates that majority of the respondents were married, family size up to 10 members and belonged to urban area. More than 75% of respondents did not receive any kind of medical care as well as psychological care after displacement by government, NGO and charity.

Recommendations
Government of Pakistan must provide proper shelter to the Internally Displace People to spend a better life. Government should take initiatives for IDPs and job opportunities should be provided to these people instead of paying monthly stipend. In such way they will earn for their families and will contribute towards the economy of Pakistan. Medical care should be provided in the camp. Medical care should be first priority of the government in such circumstances. Early diagnosis and treatments of PTSD are essential to avoid possible long-term neuro-psychiatric changes in the brain physiology and function. If untreated, PTSD often contributes to substance abuse and the development of other co-morbid psychiatric disorders such as depression. Therapist should assess the risk factors and consider them as potential treatment targets or as factors that may affect treatment staging, progress and outcome.

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ARE LADY HEALTH WORKERS MEETING THE HEALTH NEEDS OF THE WOMEN OF ADYALA VILLAGE DISTRICT RAWALPINDI PUNJAB PAKISTAN?

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Abstract

Background: Over the past two decades the Lady Health Worker (LHW) Program has become an important element in the Government of Pakistan’s to raise the health status of women and children in villages and poor urban areas. In societies where women have little access to information regarding health issues and restricted mobility in seeking information and care the lady health workers are the best tool for providing information, education, health and family planning care to women and children at their doorsteps.

Methods: A Qualitative Study was conducted in union council of Adyala village name also Adyala in District Rawalpindi. Village Adayala was selected for study because it was fully covered by LHWs and it was the most populated village in Tehsil Rawalpindi. Where LHWs have been working for the last 13 years. Data was collected using in-depth interviews with child bearing age women. Snow ball sampling technique was adapted.

Results: The study revealed that lady health workers are committed to their duties. Every day they perform their duties if there is snowy cold or rainy season. They are also having volunteering behavior. The program on the whole is well-designed and if various technical and logistics shortcomings can be sorted out. It is able to provide the adequate health care coverage to the rural areas of Rawalpindi.

Conclusion: The study revealed that most of the respondents were satisfied from the LHWs health care services. Lady health workers have had considerable impact in two major area of her duties motivation for EPI, skilled care deliveries and promotion and acceptance of family planning. Health education messages are also has greater impact on the community. There is also greater awareness of benefits of breast-feeding proper nutrition and hygiene. (Pak J Public Health 2014;4(3):19-22)

Key Words: Community health workers, village health workers, community perception about LHW and how they can improve community health.

Introduction

In 1978, the World Health Organization’s (WHO) and UNICEF (united nation children funds) convened a Conference on Primary Health Care (PHC) at Alma Ata. In this Conference with government of 134 countries as well as non-government stakeholders were brought together to reset the international health agenda. The Alma Ata Declaration OR Primary Health Care Approach must evolve from economic conditions and socio cultural and political characteristics of a country and its communities (1).

Hence the countries signatory to Alma Ata Declaration considered the establishment of Community Health Workers Program synonymous with primary health care approach. As a result, in the 1980s primary health care was seen as a mass production activity for training community health workers in several developing countries. Similar to other developing countries Pakistan too had poor health indicators in maternal and child health during the 1970s and 1980s (2).

There was lack of communication between communities and health system. A major chunk of resources was being spent on territory care thus neglecting primary health care and rural population (3).

Consequent to above facts and being a signatory to Alma Ata Declaration the Government of Pakistan with support from WHO showed its commitment by launching community health workers program known as National Program for Family Planning and Primary Health Care (FP&PHC) in 1994. They program popularly known as Lady Health Workers. Program has been able to muster community participation through creation of awareness and bringing about changes in attitude regarding basis issues of health and family planning by establishing comprehensive provision of primary health care at grass roots level (4).

In Pakistan LHW, s acts as a bridge between care providers of health system and community. They are providing preventive, promotive and curative services to the communities in the field of health.
education maternal and child health nutrition family planning and treatment of minor illnesses. They are also involved in at national level in health related activities e.g. Polio National Immunization Days (NIDs) maternal and neonatal tetanus elimination activity and etc. (9).

Methods
A Qualitative study was conducted from January 2013 to June 2013. A semi structured questionnaire was designed and translated into Urdu. Pre tested was done in neal mal village which is covered by lady health workers and collected data. Snow ball sampling technique was adapted to collect the data. Fifteen in-depth interviews were conducted with child bearing age women. After collected the data it was describe in MS word and analyzed thorough content analysis.

Results
The results are obtained from the in-depth interviews. Numbers of interviews were 15. 12 respondents were satisfied and 3 were unsatisfied. Satisfied women were very happy from the lady health workers good attitude. The satisfied respondents explained that their area lady health workers were very cooperative and supportive for them. On the basis of this study the lady health workers in village Adyala Tehsil Rawalpindi district Rawalpindi. Dedicated team of lady health workers who are performing their duties as best as they can, with whatever resources they have for their area. The study showed that lady health workers committed to their duties. The lady health workers never refused any women in village. Respondents told that LHW program is the oldest one that's why we know health from since long time almost 19 years back but community midwives is new program for it will take some years for its acceptance among child bearing age women. Most of the respondents were local residents of village. Most of them were educated few of them were illiterate. The bar graph shows respondents level of education.

![Number of Respondents](Fig1: Bar Graph Showing Respondents Level of Education)

Table 1: Satisfaction Level of Respondents

<table>
<thead>
<tr>
<th>Respondents views</th>
<th>Not at all satisfied</th>
<th>Slightly satisfied</th>
<th>Moderately satisfied</th>
<th>Very satisfied</th>
<th>Extremely satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,11,12,14</td>
<td>vs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,4,5,10,13,15</td>
<td>Ex</td>
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<td></td>
</tr>
<tr>
<td>5,6,8</td>
<td>na</td>
<td></td>
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<td></td>
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<tr>
<td>7</td>
<td></td>
<td></td>
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<td>ex</td>
</tr>
</tbody>
</table>

Description of Table:
Most of the respondents were extremely satisfied and very satisfied. Only there were unsatisfied because their area LHW was not working due to some reasons.

Discussion
This study is discussing the whole process of research and duties of lady health workers. This study was conducted to explore the perceptions of the community about the health care being provided by lady health workers. The intention was to access if the target community accepts the lady health workers and in what capacity. How much they rely on her advice and treatment. What they expect her to do for them in context of health and whether they consider the services she provides adequate or if they require additional services. Community health workers are primarily identified as effective providers of health education, direct services or outreach. The most frequent consumers of the services provided by LHWs are the people whose physical and financial accessibility to health care is limited. The people in higher income group prefer to go to a private
doctor or hospital (government or private) for treatment. Only poor people go to basic health unit (BHU) and rural health centre (RHC) because they cannot afford private medical care. The basic reason for poor people to consulting the lady health worker is to get paracetamol tablets, and cough syrup, most of other medicines contraceptive pills and condoms.

Expectations of the community from lady health workers varies with the economic and educational status of the respondents, with rich having very few expectations and poor women having the highest level of expectations. However, the expectations are overall realistic as the community women are aware of duties and training period.

According to the American Journal of Public Health in United States they define community health workers broadly as community members who work almost exclusively in community setting and who serve as a connector between health care consumers and providers to promote health amongst groups that have traditionally lacked accessing to adequate care. By identifying community problems, developing innovative solutions and translating them into practice, community health workers can respond creatively to local needs. Characteristics of successful community health workers Program should be continually assess community health needs and demographics, hire staff from the community who reflects the linguistic and cultural diversity of population served, and promote shared decision making among the program governing body, staff and community health workers. The Program should incorporate scientific knowledge about preventive and basic medical care yet relate these ideas to local issues and cultural traditions.(6).

From regional perspective an exploratory study was done in Iran, In short the community health workers program provides a compelling example of comprehensive primary health care in that Bevharzes (used for community health workers in Iran) provide basic health care but also work with community members and other sectors to address the social determinants of health (7).

From developing countries perspective community based cross sectional study was conducted in Mali. The objective of this study was to assess the performance of community health workers in promotion of basic child health services in rural Mali. Continuous training transport means, adequate supervision and motivation of community health workers through introduction of financial incentives are key factors to improve the work of community health workers in rural communities (8).

In Bangladesh various community based interventions has been proposed to improve maternity care. A study was conducted to improve maternal health by posting midwives at village level. Study findings suggest that the maternal survival rate can be improved by the posting of midwives at village level if they are given adequate training (9).

A qualitative study was conducted in Papua New Guinea 33 In-depth interviews were taken from rural health workers to examine what factors motivate them and what kind of factors demotivates them from their jobs in rural setting. They said that shortage of medicine create problems for them and mostly people respect them because they belong to the same clan and speak the same language and inform them about their health problems and tell their solution (10).

In developing countries most of the child births occurs at home and is not assisted by skilled attendants. This situation increases the risk of death for both mother and child and has severe maternal and neonatal health complications. The purpose the study was to explore pregnant women's perceptions and utilization of traditional birth attendants (TBA) services in a rural local Government area in Ogun State, southwest Nigeria. Most of the respondents said that TBA culture is socially acceptable in their settings. The system is closer to their houses and cheaper than the hospital. In short the respondents told this system is available, affordable and accessible to them. This study finding revealed a positive perception and use of TBA services by the respondents (11).

A mixed methods study was conducted in Eastern Uganda among 125 community health workers providing either dual malarial or pneumonia management alone for children aged 4 to 59 months. Performance was assessed using knowledge tests case scenarios of sick children, review of community health workers registers and observation of community health workers in dual management arm assessing respiratory symptoms. Study finding revealed that community health workers can manage malaria and pneumonia with adequate supply of medicine and training (12).

The potential for community health workers to improve child health in Sub-Saharan Africa. An impact evaluation was conducted to assess volunteer community health worker's effect on child morbidity and mortality to calculate volunteer retention. Study finding revealed that community workers decreasing the child deaths and improving the care seeking practices and new income generating opportunities (13).

In Zimbabwe village health workers play essential role in primary health care system and the fight against HIV/AIDS (human immune deficiency virus and acquired immune deficiency syndrome) Community health workers selected though community elders. Village health workers receive ongoing training as well as uniforms and health kits. They are given bicycle. They check the children and pregnant women in the village they belong to the same community that's why they knew all women and children in the village (14).
A study was conducted in Bangladesh to assess the community health workers performance in Dhaka Slum areas where women volunteer community health workers were working. The study showed that after community health workers program launching maternal health has improved as compare to other area of country where community health workers were not working (15). All above studies finding shows that community health worker improve community health. They are accessible to the communities and affordable. They are working very well and they are committed to their duties even at low cost.

In this study all of the respondents told that LHWs work regularly imparted health education messages to the community and the most of the respondents were appreciative of this as they feel that even illiterate people are developing health awareness through the lady health workers. The respondents were also happy to receiving the health education messages about water and sanitation or protecting and cleaning of drinking water resources. It keeps them away from Dengue fever and Diarrhea.

A high level of knowledge on the part of LHWs was commendable in the case of common diseases like Diarrhea still much improvement was required to enhance their knowledge in terms of other common diseases like Malaria the cause of which was apparent.

**Conclusion**

Most of the respondents were satisfied and they were well aware about the duties of lady health worker. Respondents told that lady health workers are very cooperative. They always help the patient who comes to their health houses for medicine or advice even they did not refuse anyone. Respondent also told that lady health workers belong to our village they know the all community and we trust them and share our health problems with LHWs. They guide us in detail. Most of the respondents asked that government should conduct training for LHWs, that they can easily manage normal births in our village.

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RISK FACTORS AND PREVENTION STRATEGIES OF CARDIOVASCULAR DISEASES IN BANGLADESH: A SCOPING REVIEW OF CURRENT RESEARCH AND POLICY DOCUMENTS

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Abstract

Background: Along with other developing countries Bangladesh is also going through an epidemiological transition from infectious diseases to chronic non communicable diseases (NCDs). In Bangladesh, NCDs are estimated to account for 52% of all deaths. Cardiovascular diseases (CVDs) alone account for 27% of these deaths. Our aim was to conduct a scoping review of literature to ascertain what is known about risk factors and prevention strategies to reduce the burden of CVDs in Bangladesh.

Methodology: Based on York methodology based scoping review, a comprehensive search of published academic articles, conference processing and grey literature was carried out through pub Med, BanglsJOL, Google and Google scholar. We summarized risk factors and diseases outcomes and as well as Prevention strategies of CVDs among adults (? 18 years) in both urban and rural area of Bangladesh.

Result: After conducting scoping review and as well as considering inclusion criteria we found 9 studies that fulfill study objectives. Among all the studies 4 were cross sectional, 2 were case control, 1 was population-based prospective study, one was retrospective observational study and another one was survey. The most common risk factors of CVDs, as identified by these studies, were tobacco consumption, hypertension (HTN), Diabetes mellitus, dyslipidemia, animal protein-rich diet and sedentary lifestyle. Only 3 papers were found related to prevention strategies. It is unfortunate that except tobacco consumption there were no papers related to chronic disease prevention strategies.

Conclusion: CVDs are considered as a major public health concern in a resource poor country like Bangladesh. Addressing the risk factors sustainable interventions could be designed and implemented on a larger scale to prevent the rise of CVDs in Bangladesh. (Pak J Public Health 2014; 4(3):23-28)

Key words: CVDs, Risk factors, Prevention strategy.

Introduction

Cardiovascular diseases are caused by disorders of the heart and blood vessels and include coronary heart disease (heart attacks), cerebro-vascular disease (stroke), raised blood pressure (hypertension), peripheral artery disease, rheumatic heart disease, congenital heart disease and heart failure. Cardiovascular diseases (CVDs) are the leading cause of death globally. Approximately 17.3 million people died from CVDs in 2008 which represents 30% of all global deaths. Among them an estimated 7.3 million deaths were due to coronary heart disease and 6.2 million were due to stroke. Among all the CVD deaths 80% take place in low- and middle-income countries and occur almost equally among men and women. It is estimated that by 2030, almost 23.6 million people will die from CVDs, mainly heart disease and stroke (WHO, 2011).

According to World Health Organization the most important behavioral risk factors of CVDs are unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol. These risk factors are responsible for about 80% of coronary heart disease and cerebrovascular disease (WHO, 2011). People in low- and middle-income countries are more exposed to risk factors such as tobacco, leading to CVDs and other non-communicable diseases. At the same time they often do not have the benefit of prevention programs compared to people in high-income countries. People in low- and middle-income countries who suffer from CVDs and other non-communicable diseases have less access to effective and equitable health care services which respond to their needs (including detection of diseases at early stage). As a result, many people in low- and middle-income countries die younger from CVDs and other non-communicable diseases, often in their
Unlike other developing countries, Bangladesh is also experiencing an epidemiological transition from infectious, communicable diseases to chronic, non-communicable diseases (NCDs) like cardiovascular diseases, diabetes, cancer, chronic respiratory diseases, and injury (BDHS, 2011). According to WHO (2011) in Bangladesh, NCDs were estimated to account for 52% of all deaths and among them 27% were due to CVDs. In a recent study it was projected that death rate from CVDs would be 4 times higher in 2010 and 21 times higher by 2025 (Karar et al. 2009) (16). According to World Health Rankings (2011), coronary artery disease was ranked as first and stroke was the third leading cause of death which accounts for 17.11% and 8.57% respectively.

CVDs are emerging as an epidemic in a resource poor country like Bangladesh. So it will be better if we can prevent the risk factors of CVDs. So risk factor identification is the only way to achieve this goal. In this regard my study will find out the risk factors and prevention strategies of CVDs that are needed to develop effective national health policy to prevent and manage them. This way, we can reduce morbidity and mortality among CVD patients and alleviate the burden of CVDs. This paper explored the availability of literature on risk factors and prevention strategies of CVDs in Bangladesh through a scoping review which, unlike a systematic review, offers a much broader perspective in the respective field which makes it more appropriate method to assess the risk factors and prevention strategies of CVDs in Bangladesh.

**Methodology**

The main objective of our study was to identify the unique risk factors associated with major CVDs and to identify prevention strategies that could be implemented in Bangladesh with a view to reduce the burden of cardiovascular diseases as well as NCDs. A scoping review was performed based on the York methodology outlined by Arksey and O’ Malley from the University of York, United Kingdom. The ‘York framework’ suggested five stages that we have followed for this review: (Fig1)

1. Identifying the research question
2. Identifying the relevant studies
3. Study selection
4. Charting the data
5. Collating, summarizing and reporting the results

Initially, we defined research questions and developed search strategy and discussed them in a team meeting. Relevant literatures were then identified through a comprehensive search across different databases including Pubmed, Google, Google scholar and Bangladesh’s country specific search engine (BanglaJOL). We categorized the search terms according to location, methodology and outcomes: (1) Location: "Bangladesh." (2) Method: "prevalence, cross-sectional, cohort studies, case control, survey." (3) Outcome: "Cardiovascular diseases mainly ischemic heart disease, cerebrovascular disease/ stroke, myocardial infarction, hypertension/ high blood pressure, coronary artery disease and peripheral artery disease". The "AND" Boolean operator was used to combine search terms across the categories and the "OR" was used to combine within the categories.

At this stage studies will be excluded based on the following exclusion criteria: Being confined to a specific age group, Studies reporting the results of larger studies as duplications and Studies conducted among Bangladesh are residing elsewhere.

**Data extraction**

We extracted the following information for each reviewed study: (1) Authors and publication year, (2) Title and journal, (3) Study location (urban or rural), (4) Study design, (5) Sample size, (6) Sample characteristics such as age and gender, (8) Disease type: CVD [Hypertension (HTN), Ischemic Heart Disease (IHD), Coronary heart disease (CHD), Stroke], (9) Outcome assessment (objective or subjective), (10) Risk factors significantly associated with CVD and (11) Prevention strategies for CVD in Bangladesh. Methods use for data searching is describe in figure 2.
Methodology used for data searching

Figure 2: Steps of the method used to sort out relevant literatures for reviewing

Results

After reviewing the published existing online articles we found 14 articles fulfilled the eligible criteria. All these studies analyzed the risk factors by using/through different logistic regression model e.g. multivariate or binary logistic regression or by using correlation coefficient. The Table 1 showed the summary findings of the existing reviewed articles.

Among all the studies 56% were related to heart disease, 22% were related to stroke and 22% conducted on CVDs as a whole. According to the majority of the Risk factor studies the significant risk factors of heart diseases were smoking, higher BMI, dietary habit such as animal protein rich diet, previous history of diabetes, hypertension, higher age, educational and economic etc. One of the study found that tobacco consumption was more prevalent among young (60.06%) compared to older people (48.43%). According to Zama et. al in 2004 (18) found male tobacco users used any form of tobacco on average 11 times in a day while females used 8 times in a day. The proportion of tobacco use was higher in older age groups in both sexes.

Betel quid and arsenic were significant risk factor among the 2 studies. According to another study hypertension, Smoking, lipid disorder, heart diseases, diabetes mellitus, and previous history of stroke, patients who were on irregular use of antihypertensive drug were the significant risk factors of Stroke. The most concerned outcome of this study was that majority of the patient had two modifiable risk factors. After searching prevention strategies of CVDs in Bangladesh we have found 3 relevant papers (Table 2).
Among them one was review paper, one was policy brief of NCD and another was a cross-sectional study to find out the influence of attitude, subjective norms, perceived behavioral control on intention to perform CVDs preventive behaviors among young adults in Bangladesh. The outcome of these studies is given in the following table. Though it is found that there are many risk factors still there is only law as prevention strategy on smoking and tobacco control exists. Since 1978 treatments were only available in tertiary care hospitals. Heart 'camps' throughout rural parts of the country to treat and educate cardiac patients; published booklets and educational materials to build awareness of CVD prevention. From 2007 Upazilla NCD Project is working to develop NCD capacity among public and private providers and No communicable Disease Control and Public Health Intervention Program of the Directorate General for Health Services are working to spread awareness on NCDs and NCDs care.

Discussion
Cardiovascular diseases have been studied extensively in many other countries but in Bangladesh studies related to risk factors and prevention strategies are relative scarce. From searching literatures I found that this is the first and only review that has been conducted on this topic in Bangladesh. In this review it has also been found that though the outcome diseases were different in different studies, there were similarities between the risk factors of those diseases. However as the study site were different and the outcome disease was also different so it was difficult to compare across the studies and predict the trends of these factors in different context. It had been observed that there were scarcity of data in urban and rural setting differently and also in different socioeconomic status and different age groups.

According this review the most significant risk factors for stroke were hypertension, tobacco consumption, diabetes mellitus, lipid disorder, heart diseases, previous history of stroke and irregular use of antihypertensive drugs. This finding is similar to a study conducted in India, from where it is found that metabolic disorders and smoking were significantly associated with ischemic stroke (Sridharan, 1992) (14). Another study conducted in India found five risk factors of Ischaemic Stroke - hypertension, serum total cholesterol, use of anticoagulants and antiplatelet agents, past history of transient Ischaemic attack and alcohol intake (Zodpey, Tiwari & Kulkarni, 2000) (19).

From this review it was found that Hypertension, tobacco consumption and abdominal obesity were significantly associated with Coronary heart disease. Another study found that dislipidemia was significantly associated with CHD among aged people (over 40).

According to this review the most common risk factors of Ischaemic heart disease were increased body weight, higher body mass index, previous history of other diseases like diabetes, hypertension, family history of cardiac diseases, smoking habit and sedentary lifestyle. Another study found an animal protein rich diet as risk factors of heart diseases. Study conducted in an urban population of India similarly found that smoking, physical inactivity, hypertension, hypercholesterolemia, diabetes and obesity were significantly with CHD (Gupta et al. 2001) (5). Another study conducted in India found that diets rich in vegetables and use of mustard oil could the lower risk of IHD among Indians (Rastogi et al. 2004) (12).

In this review it was found that there was only prevention strategy has been implemented in Bangladesh that was restriction of tobacco smoking in public places and advertisement. A national strategic plan for Tobacco control also has been adopted. According to this review we found that there are two tertiary care hospital in Bangladesh for the emergency cardiac care, and promote prevention and treatment of cardiovascular diseases. Another Upazilla NCD project is going on to develop NCD capacity among public and private providers in project sites. Noncommunicable Disease Control and Public Health Intervention Program of the Directorate General for Health Services are going on since 2007 to develop awareness of NCDs among senior citizens and provide equipment for improving the quality of NCD care.

This review has some limitations. Unlike a systematic review it was not possible to assess the quality of the studies included in this review. Due to lack of available studies on CVDs we reviewed all the study related to different kinds of CVDs. It might be possible to miss some information due to inaccessibility of certain databases. In addition, there might have been other unpublished studies that are not available on internet which could not be revealed. Moreover, information on certain groups, such as tribal or ethnic minorities, is missing. Nevertheless, the findings of this review provide useful insights for future research needs in this area.

Conclusion
This review found a noticeable published literature gap regarding risk factors and prevention strategies of CVDs in Bangladesh. Now CVDs are considered as a major public health concern in a resource poor country like Bangladesh. Addressing the risk factors it could be possible to design sustainable interventions which could be implemented on a larger scale to prevent the rise of CVDs in Bangladesh. It has been also found from this review that there are no strong policies for preventing CVDs in this country.
Reference


STRIKES OF HEALTH CARE PROVIDERS AND PHARMACIES IN PAKISTAN: AN ETHICAL ISSUE

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Abstract

Background: Strike of industrial workers is very common in the world but the question arises do the health care providers have the right to go on strike? Strikes of health care providers bring lots of ethical issues. Usually all strikes and protests by the health care providers are staged for better service structure, against Government policies, better working environment or in support for other professionals. Such strikes not only increase the sufferings of patients and their attendants but also result in delay in treatment, loss of work and indirect costs.

Discussion: The International Labor office recommends that the right to strike may be restricted or prohibited in essential services including hospital sector. The religious code of ethics also values the life of a human extraordinary. During the last two decade Pakistan has seen a number of strikes of the young doctors, nurses, Paramedics in public sector and private pharmacies (including Whole sale markets, medical stores, and chemist shops). During these strikes a large number of patients have died due to non availability of medical care and medicines. Many patients died because of denial of doctors and nurses to provide the care in emergency services.

Challenges: The service structure, long working hours, poor working conditions and security issues are challenges to avoid strikes.

Conclusion: Not going on strike can save many avoidable deaths. Benefits of going on strike are never outweighed by the immoral sufferings or deaths of patients. No one is forced to become a health care provider but once any one joins such profession s/he is bound under certain moral obligations including not to go on strike. Health care providers should not leave their patients in suffering merely for their gains and on account of bad policies of the politicians. (Pak J Public Health 2014;4(3):29-32)

Keywords: Health care providers, Pharmacies, Strike, Ethical issue.

Introduction

Strike is "a concerted stopping of work or withdrawal of workers' services, as to compel an employer to accede to workers' demands or in protest against terms or conditions imposed by an employer" (1). Article 20 (1) of the United Nation's universal declaration of human rights says that "Everyone has the right to freedom of peaceful assembly and association"2. Strike of industrial workers is very common in the world but the question arises do the health care providers have the right to go on strike?

Across the world as well as in Pakistan strikes of health care providers including Doctors (3,4), Pharmacists (5), Nurses (6) and Paramedics (7) bring a lot of ethical issues. All health care providers are under moral obligation to provide health care services to patients in all situations. Usually all strikes and protests by the health care providers are staged for better service structure, against Government policies, better working environment or in support for other professionals.

During the last 20 years doctors across the globe has used strike as an instrument to get their demands fulfilled (8). In 1962, doctors of Saskatchewan, Canada went on strike against the Saskatchewan Medical Care Insurance Bill (9). In March 1983, 90 % of the doctors in Israel were on strike due to wage conflict3. The strike of resident medical officers of New Zealand in 2006 was seen as smashing the 2000 years old Hippocrates oath8.

The federal legislation in USA requires a prior 10 day strike notice by nurses so that management can make arrangements (10). Whatever is the cause of strike by health care providers, patients pay the heavy price of it sometimes in the form of damage or loss of their lives. There are numerous ethical concerns associated with strikes and protest of health care providers in Pakistan. Such strikes not only increase the sufferings of patients and their attendants but also result in delay in treatment, loss of work and indirect costs.

1. International Labor Office (ilo); Essential Services And Right To Strike:

The 2006, digest of decisions and principles of the Freedom of Association committee of the governing
body of the ILO Para 582, says that "Essential services in the strict sense of the term namely those services whose interruption would endanger the life, personal safety or health of the whole or part of the population".

According to the digest Para 576, the right to strike may be restricted or prohibited: (1) in the public service only for public servants exercising authority in the name of the State; or (2) in essential services in the strict sense of the term (that is, services the interruption of which would endanger the life, personal safety or health of the whole or part of the population). One of the essential services is the hospital sector.

2. Qur'an And Value Of Life:
The life of a human is extraordinary in Islam. Qur'an (5:32) says, "If any one slew a person ... it would be as if he slew the whole humanity: and if any one saved a person, it would be as if he saved the whole humanity".

3. Strikes Of Health Care Providers In Pakistan:
During the last two decade Pakistan has seen a number of strikes of the young doctors, nurses, Paramedics in public sector and private pharmacies (including Whole sale markets, medical stores, and chemist shops). During these strikes a large number of patients have died due to non availability of medical care and medicines. Many patients died because of denial of doctors and nurses to provide the care in emergency services.

3.1. Doctors:
Strike of doctors is a violation of beneficence and non-maleficence principles of medical ethics. A doctor who takes the Hippocrates oath enters into a social contract that patient's health and life shall be his/her priority. The doctors of the Public sector hospitals in federal capital and four provinces of Pakistan have staged protests at different occasions for their demands of better service structure, working environment and security. Government fulfilled many of their demands but in Pakistan strikes have no end. Many critics of the young doctor's strikes in Punjab say that doctors go on strike only because opposition is backing them against the Punjab government. The police of Punjab province of Pakistan had taken action against the doctors by arresting and registering FIRs against them which aggravates the situation. A father of one and half year's old child in Lahore lodged a FIR against four doctors who removed the drip of the child to join the strike resulting in death of the child.

3.2. Nurses:
Nursing is considered one of the sacred professions in the world. One of the branches of applied ethics is nursing ethics. The Nurse's primary professional responsibility is to people requires nursing care (16). Now a day's focus of nursing ethics has been shifted more on human rights of patients than virtues. Nurses in Pakistan have also got inspired by the young doctors. The nurses working in the public sector of Punjab Province have recently protested on roads for better service structure. During the strike period most of the patients did not receive their medicine and even not emergency services.

3.3. Paramedics:
Paramedics are also important health care personnel including dispensers, operation theater assistants, dressers, ward boys, ambulance drivers. Their role in emergency services is very important. In Pakistani health sector Paramedics are probably the first who took the path to go on strike for their demands. Strike of paramedics practically makes the hospitals dysfunction.

3.4. Pharmacies:
Strikes of the pharmacies (Medicines whole sale dealers, medical stores and Chemist Shops) in Pakistan are very common. Medicines are sold here all other commodities. The drug store owners usually close their shops against the enforcement of drug laws, raids of drug inspectors, fewer discounts by the Pharmaceutical companies or to pressurize Government to fulfill their demands. Due to various strikes of Pakistan Chemist and Druggist Association many patients died due to non availability of medicines and shut down of medical Stores. The Punjab Government also lodged FIRs (first Information report) against the association leaders. All actions by the Government were withdrawn after negotiations but relatives of patients who lost their lives did not receive any justice.

Challenges:
There are numerous challenges to convince health care providers not to go on strike. Although pay scales of the health care providers have been revised but they are still not satisfied with that. The long working hours, poor working conditions and security issues are also challenges to avoid strikes. Health is not a priority in Pakistan, only 2.5 % of the total GDP is spent on health in Pakistan. Pakistan is spending billions of rupees on security of "ailing nation" but is not providing them a good health. Political willpower and commitment is required to understand the problems of the health care providers. The working conditions of the health care providers need to be improved. There is a need for recruitment of more health care providers to decrease the burden of working hours. In some areas of Pakistan security of the health care providers is biggest challenge.
**Conclusion**

It is usually considered that the health care providers like doctors, nurses, and people working in hospitals who have the responsibility of lives of the people as part of their job should not go on strike (25). Not going on strike can save many avoidable deaths. Benefits of going on strike are never outweighed the immoral sufferings or deaths of patients (26). No one is forced to become a health care provider but once any one joins such profession s/he is bound under certain moral obligations including not to go on strike. It is also argued that health care providers should not leave their patients in suffering merely for their gains and on account of bad policies of the politicians. R. L Stevenson included the physician among the "classes of men that stand above the common herd" and "flower of our civilization" then how can anyone expect such immoral act from them (27).

The religious code of ethics also does not allow any person to leave a person who is dying or can die. Hospital sector is included among the essential services and according to ILO the right to strike may be prohibited or restricted for essential services.

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