Practice of self-care and self-medications among government health care providers

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Abstract
Aim: To identify the self-screening and periodic health check-up practice among government health personnel.

Materials and Methods: A cross sectional study was carried out among qualified allopathic government doctors regarding self-care practices like measuring of blood pressure, blood sugar estimation, visiting dentist, breast self-examination and undergoing cancer cervix screening and self-medication practices.

Results: Among the 52 subjects who took part in the study, majority of the study subjects [n=21, 40.4%] said that they got their blood sugar examined once in 12 months at least, more than 90% of the study subjects got their blood pressure checked once in a year or more [n=49, 94.2%] and majority had rarely visited the dentist [n=27, 51.9%]. Among the 15 female subjects, majority did breast self-examination (BSE) done at least once in a year or more [n=45, 86.5%] but majority said that they rarely [n=10, 66.7%] underwent screening for cancer cervix screening in their lifetime. Regarding self-medication, all study subjects said that had self-medicated and when sick, majority said that they rarely [n=37, 71.2%] consulted another doctor, majority said that they have rarely [n=19, 36.5%] practiced isolation when sick with infectious disease and have sometimes gone to work when sick [n=26, 50%].

Conclusion: There is need for improving knowledge of self-care and self-medication among medical practitioners, which will influence their attitudes, behaviours toward personal and patient level screening. A self-care workbook for doctors can be developed with on-going training, support and evaluation.

Keywords: Self-care, Self-medication, Health personnel, Cross sectional.

Introduction
Health personnel are at higher risk of contracting infection due to nature of their job, subjected to undue stress and pressure in work environment which will have an impact on their health status. It is important that the guardians of society’s health also take care of their own health and know about the self-care and self-medication practice.

Self-care: Self-care is the primary resource of any health care system involving what people do for themselves to establish and maintain health, prevent and deal with illness, influenced by number of factors like hygiene, nutrition, lifestyle, environmental, socioeconomic factors, self-medication, public health, ready access to drugs. Self-care involves paying attention to the physical, psychological, emotional and spiritual aspects of your life.

Medical practitioners enjoy somewhat better health on average than the general population, primarily due to their socioeconomic status rather than their medical occupation, the exception being a lower risk of smoking-related illness, alcoholism and drug abuse. There is also compelling evidence of an increased suicide risk for all medical practitioners but particularly for female doctors. Working while ill is more common among doctors than other occupations. Thou doctors rate well on preventative health measures they tend not to seek independent medical advice for themselves and are inclined to self-medicate increasing the risk of drug abuse.

Self-Medication: Self-medication is one element of self-care and is the selection and use of medicines by individuals to treat self-recognised illnesses or symptoms. It is widely practiced worldwide in urban and rural population including developing countries like India as it provides a low cost alternative for people. It is an important issue as far as the health of an individual is concerned and can prevent and treat ailments that don’t require medical consultation if it is accompanied by appropriate health information.

Self-medication involves acquiring medicines without a prescription, resubmitting old prescriptions to purchase medicines or using leftover medicines stored at home. Not much is known about self-medication. It is influenced by multiple socioeconomic and epidemiological factor. Responsible self-medication can reduce the burden on health care facilities by decreasing the cost and time people spend to visit health care facilities for minor symptoms. Inappropriate self-medication can have a number of potential risks.

Stress and work environment: Doctors are the serious sufferers of organizational role stress. Stress management is of special relevance to doctors who encounter extreme challenges in their professional and personal life.
The overall prevalence of stress among doctors is high, especially among those working in ICU setups in India. Studies indicate that higher the life satisfaction, lower would be the total organizational stress especially among the female doctors.

It has been observed that stresses among doctors are due to unpredictable working hours, workload, lack of holidays, extra duty, staff conflicts, patient’s pressure etc. Adopting certain strategies like social time spending, reading, playing games, practicing yoga/meditation and even listening to music the stress level can be managed.

Health of doctors-Burn out: Despite all stress reduction techniques, clinicians who care for seriously ill cancer patients are at high risk of developing burnout by virtue of the challenges presented and impact of these can be severe and far reaching. Distress and grief experienced by doctors due to patient loss can compromise clinicians’ personal well-being leading to burnout, moral distress, compassion fatigue, and poor clinical decisions adversely affecting patient care and it important to have a self-care and self-awareness plan when caring for patients.

Stress and burnout experienced by health care professionals requires prevention through self-care.

Health and self-care: Self-care strategies exist in both the personal and professional realms with proven benefits in mitigating the effects of burnout, compassion fatigue, and moral distress. It is expected that healthcare providers who maintain and develop the society's health, should have a higher level of knowledge, attitudes, and practice in the field of healthy behaviours.

Current evidence indicates that the medical student, resident, and fellow receive inadequate self-care training. Medical student curricula are focused on palliative and end to end domain. Prevalence of diseases like diabetes which have component of self-care as part of its management is rising and is affecting rural as well as urban people.

Level of knowledge and attitudes of female healthcare professionals have greater influence on motivation to practice screening methods. It is agreed that adverse effects due to inadequate and inappropriate use of antibiotics without prescription can be minimized by proper education. This can be effectively done through national awareness programmes, educational programmes.

Thus this study aims to identify the self-screening and periodic health check-up practice among government health care providers. And to study about self-medication practices among health care practitioners.

Materials and Methods
A cross sectional study was carried out for a period of 6 months between March-August 2015 in the Davanagere district, Karnataka. Study subjects included all qualified allopathic doctors who were working in the government health sector as permanent employees.

Inclusion criteria:
- Qualified allopathic doctors registered their degree with medical council and working as permanent employees in the government health care system at Davanagere district.

Exclusion criteria:
- Doctors working mainly as administrators, programme officers and on deputation to other places.
- Doctors working in ESI hospital.

Study Variables
Self-care: Practice of health care in relation to regular screening like measuring of blood pressure, blood sugar estimation, visiting dentist for oral hygiene and for females, regular practice of breast self-examination [SBE] and undergoing cancer cervix screening was considered.

Self-medication: Consumption of drug without prescription, seeking consultation by another doctor, undergoing investigation before taking treatment, working when sick and seeking isolation when sick from a communicable disease were considered under self-medication.

Recruitment
Doctors working at government health sectors in Davanagere district were contacted during the training programmes and monthly meetings held for them after obtaining oral permission from the authority. Those who agreed to be part of the study were given the pre tested, semi structured questionnaire.

Statistical Analysis
Data collected were entered using Epidata version 3.1 and analysed using IBMSPSS 21.0.

Result
Among the 52 subjects who took part in the study, majority were males [n=37, 71.2%] compared to females [n=15, 28.8%]. Majority worked in PHC [n=45, 86.5%] followed by community health centre [n=4, 7.7%] and district hospital [n=3,5.8%]. Majority of the subjects were MBBS graduates [n=46, 88.5%] followed by those who have completed post-graduation [n=6, 11.5%].

Mean age of the study subjects was 41.67±8.9 years. Difference between the mean age of the males [n=37, 37.89±6.8 years] and females [n=15, 41.67±8.9 years] was not statistically significant [t=1.658, df=50, p=0.104]. Mean experience of study subjects was 10.75 ± 6.3 years. Difference between the mean experience of
the males [n=37, 9.9±5.8 years] and females [n=15, 12.8±7.3 years] was not statistically significant [t=-1.510, dF=50, p=0.137].

Among the 52 subjects who took part in the study [Table-1], majority of the study subjects [n=21, 40.4%] said that they got their blood sugar examined once in 12 months at least, regarding monitoring of the blood pressure, more than 90% of the study subjects got their blood pressure checked once in a year or more at least [n=49, 94.2%] and majority of study subjects said that they rarely visited the dentist [n=27, 51.9%].

<table>
<thead>
<tr>
<th>Blood Sugar estimation</th>
<th>BP recording</th>
<th>Visit to dentist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
</tr>
<tr>
<td>Once in 3 months</td>
<td>17</td>
<td>32.7</td>
</tr>
<tr>
<td>Once in 6 months</td>
<td>7</td>
<td>13.5</td>
</tr>
<tr>
<td>Once In 12 Months</td>
<td>21</td>
<td>40.4</td>
</tr>
<tr>
<td>Rarely</td>
<td>7</td>
<td>13.5</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Among the 15 female subjects who took part in the study [Table -2], majority said that they got breast self-examination [BSE] done at least once in a year or more [n=45, 86.5%] but majority said that rarely [n=10, 66.7%] got examined for cancer cervix screening in their lifetime.

<table>
<thead>
<tr>
<th>Breast self-examination</th>
<th>VIA/Vili/PAP Smear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Once in 3 months</td>
<td>5</td>
</tr>
<tr>
<td>Once in 6 months</td>
<td>3</td>
</tr>
<tr>
<td>Once In 12 Months</td>
<td>2</td>
</tr>
<tr>
<td>Rarely</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
</tr>
</tbody>
</table>

Regarding self-medication [Table-3], all study subjects said that had self-medicated and among the study subjects when sick, majority said that they rarely [n=37, 71.2%] consulted another doctor.

<table>
<thead>
<tr>
<th>Self-medication</th>
<th>Consulting doctor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Once in 3 months</td>
<td>12</td>
</tr>
<tr>
<td>Once in 6 months</td>
<td>4</td>
</tr>
<tr>
<td>Once In 12 Months</td>
<td>8</td>
</tr>
<tr>
<td>Rarely</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
</tr>
</tbody>
</table>

Majority of the subjects have said that they have gone to work when sick sometimes [n=26, 50%] and majority of the subjects have said that they have rarely [n=19, 36.5%] practiced isolation when sick with infectious disease. [Table 4]

<table>
<thead>
<tr>
<th>Investigation</th>
<th>Work when sick</th>
<th>Isolation when sick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
</tr>
<tr>
<td>Often</td>
<td>6</td>
<td>11.5</td>
</tr>
<tr>
<td>Sometimes</td>
<td>22</td>
<td>42.3</td>
</tr>
<tr>
<td>Rarely</td>
<td>19</td>
<td>36.5</td>
</tr>
<tr>
<td>Never</td>
<td>5</td>
<td>9.6</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Discussion
In our study, majority of females said that they got breast self-examination [BSE] done at least once in a year or more \( n=45, \ 86.5\% \) but majority said that rarely \( n=10, \ 66.7\% \) got examined for cancer cervix screening in their lifetime. \( \text{Table -2} \)

Studies have shown that the knowledge of breast cancer risk factors was satisfactory among doctors but inadequate among a large percentage of nurses and it is important to encourage the nurses to disseminate this knowledge effectively and appropriately within the general population.\(^{(17)}\)

Another study showed that despite the awareness of Self breast examination(95.4%) ,only 45 (51.7%) practice it monthly.\(^{(14)}\) Healthcare professionals that practice breast examination were only 23 (26.4%). A good number of them (78.2%) have heard of mammography.\(^{(14)}\)

Another study showed female doctors had satisfactory knowledge of risk factors of breast cancer. Majority (86%) believed that early breast cancer is curable and practiced breast self-examination once a month. This suggest the need for continuing medical education programmes aimed at improving knowledge of breast cancer among female healthcare providers.\(^{(18)}\)

Another study showed that majority of the healthcare providers (75.9%) had a good knowledge of breast cancer screening services but very few utilize the available screening services. More than half of the participants practiced self -breast examination, but only few practiced it each month.\(^{(14)}\) For health workers to function as effective promoters of breast cancer control ,educational intervention be made to increase the knowledge and awareness.\(^{(14)}\)

Self-medication
Regarding self-medication, all our study subjects said that had self-medicated and majority said that they in the past two years they had rarely self-medicated \( n=28, \ 53.8\% \).

This was consistent with another study done on students, where the prevalence of self-medication was high \( 64.8\%, \ 326/503 \) and there was significant difference. This was higher among in medical (66%), final year (75%), female (65.5%), and students living alone. Thou most of the students (medical and non-medical) reported non-favourable attitude towards self-medication, experience in self-medication was the most important reason of using self-medication and prevalence was higher among females.\(^{(19)}\)

Another study among students, reasons for self-medication was cost-effectiveness, experience of treating a similar illness , some considered their illness mild and few stated emergency use.\(^{(20)}\)

Another study from Central India showed self-medication highly prevalent in senior medical students with the reason being easy accessibility of information through media, it is said that education of the youth is the need of the hour to ensure safe practices.\(^{(3)}\)

Studies have shown that the high incidence of self-medication necessitates to strengthen communication between patients , pharmacists and doctors.\(^{(5)}\) Although majority believed self-medication to be unhealthy practice, most of them resorted to self-medication practices which was more among females.\(^{(21)}\) The common illness for which the medical students resort to self-medication practices are fever, head ache, cold, cough, vomiting, and diarrhoea.\(^{(21)}\) and common reason being convenience followed by cost saving in spite of respondents being aware of adverse effects following self-medication.\(^{(21)}\) Self-medication practices were found increasing from first year to final year student and the reason might be the knowledge of medicines.\(^{(3)}\)

Another study showed more than 53% of the respondents practiced self-medication with antibiotics.\(^{(16)}\) The prevalence of self – medication was 78.6% \( n=346 \) and larger number of females were self-medicating \( (n=203, \ 81.2\%) \) than males \( (n=143, \ 75.3\%).\(^{(4)}\)

It was found that cough and common cold (35.21%) was the predominant morbidity for which self-medication was practiced and other being diarrhoea, fever, headache, pain in the abdomen due to heartburn/ peptic ulcer. Drug groups commonly used for self-medication included antibiotics (31.09%) followed by analgesics, antipyretics, antiulcer agents, cough suppressants, multivitamins, and anthelminthic. Among the reasons given for practicing self-medication was illness being mild, time-saving, cost-effectiveness and urgency.\(^{(22)}\)

Proper workload policy, staff cooperation, time management will help a great deal in managing stress among doctors.\(^{(11)}\)

Conclusion
Results from this study suggest the need for continuing medical education programs aimed at improving knowledge of self-care and self-medication among medical practitioners.\(^{(17)}\)

Gaps in their knowledge and also awareness of the availability of these screening services will influence their attitudes and behaviours toward personal and patient level screening.\(^{(23,14)}\)

Student community and doctors has always been the fastest to adapt to changing technologies\(^{(24)}\) which can be used to assist health professionals in monitoring their own health as it has become an integral part of their life as its impact in medicine has already been significant. Studies have pointed that overall level of stress among doctors in government hospitals is quite high, indicating the stressful nature of the job. The level of stress being experienced by the doctors is variable\(^{(7)}\) and it is important to develop professional peer support group [PPSG] programme to review current medical education practices in relation to supporting and
promoting emotional health among medical students. Specific programs, such as doctor and spouse support networks and establishing PSPG advisory and review body comprising stakeholders from the state and doctors welfare association, the medical practitioner’s board and the colleges associated with the relevant medical disciplines and also model of small professional peer support groups with credible ethical framework would be helpful. A self-care workbook for doctors, can be developed and also on-going training, support and evaluation for peer support group leaders.\(^{(25)}\)

**Acknowledgement**

Department of Health and family welfare, Davanagere district in facilitating meetings with medical officers.

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