

# Psychological Immunity and Coping Strategies: A Study on Medical Professionals

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Studies have shown that increasing number of doctors is feeling stress and burnout. The present investigation is planned to find out the role of psychological immune system in the use of coping strategy and in attenuating stress and burnout in medical professionals. Sample consisted of 200 doctors (100 M.S./M.D. & 100 MBBS). Perceived Stress Scale, Copenhagen Burnout inventory, Psychological Immunity Inventory, and COPE-BREF were applied. The findings showed that the general practitioners have significantly high level of perceived stress and related burnout but their psychological immune system is influencing the stress-burnout and use of coping strategies. The general practitioners were using more active coping strategies on one hand and maladaptive on the other, however, the self regulation psychological immune system there abide a psychological immune system in the body which can be developed and enhanced to overcome stress.

Keywords: Psychological Immune System, Stress, Burnout, Coping Strategies, Specialized Doctors.

Health care practitioners live in a world of high demand regardless of the country due to the structure of the medical system, the prevailing cultural values, and the local realities etc. High exposure to stressful events among medical personnel may manifest itself in several different outcomes including depression, anxiety, selfdoubt, post traumatic stress disorder, loss of sleep and disturbed relationships with family. The common perception is that the health status of doctors is better than average; and like other higher socioeconomic groups they are less likely than the general population to suffer lifestylerelated illnesses, such as heart and smokingrelated disease (Clode, 2004). However, they are at greater risk of mental illness and stress-related problems and are more susceptible to the "3 Ds" depression (including suicide), drink and drugs (Willcock, Daly, Tennant, & Allard, 2004; Schattner, Davidson, & Serry, 2004). To fight with this scenario the psychological resources are needed.

The psychological immune system protects from prolonging or experiencing extreme negative emotions. The biological (i.e. physical) immune system protects the body from harmful substances like bacteria and toxins and in a similar way the psychological immune system (a pool of psychological resources) protects from the toxins generated from constant worry, nervous tension and anxiety which one experiences on the daily basis. Now, the pertinent question is what are the nutrients required to develop a healthy psychological immune system? The nutrients for psychological immune system researched independently so far may be optimism, future orientation, positive thinking, humor, resilience etc. An individual's responses to stress depends a great deal on his/her psychological immune system. The sources of stress for health care professionals ranged from work to family.

Feelings of job dissatisfaction and job stress are problems shared by general practitioners in many countries (Bailie et. al., 1998; Burdi & Baker, 1998; Dowell, Hamilton & McLoad, 2000; Kirwan & Armstrong, 1995; Calnan et. al, 2001). General physicians report a lack of time and heavy workload as the main causes for these feelings of discontent and stress (Appleton, House & Dowell, 1998; Dowell, Coster & Maffey, 2002; Huby, et. al., 2002; Sibbald, Bojke & Gravelle, 2003).These negative feelings may in the long-

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term lead to burnout (Van Dierendonck, Schaufeli & Sixma, 1994; Demerouti, Bakker, Nachselincr, & Schaufeli, 2001). Work stress is increasingly recognized as one of the most serious occupational health hazards reducing workers' satisfaction and productivity, and increasing absenteeism and turnover (Gianakos. 2001). Cumulative stress leads to burnout. Burnout is "an experience of physical, emotional, and mental exhaustion, caused by long-term involvement in situations that are emotionally demanding" (Mateen, & Dorji, 2009). Another valuable definition is "Burnout is the index of location between what people are and what they have to do. It represents erosion in values, dignity, spirit, and will and erosion of the human soul" (Cole, & Carlin, 2009). It may manifest as depersonalization, low productivity, and feelings of low achievement.

Some occupations aim burnout to their holders, like consultancy. Allegra et al (2003) found that the rate of burnout in the U.S. oncology community exceeded 60%. The top three signs of burnout reported were frustration (78%), emotional exhaustion (69%) and lack of satisfaction with their work (50%). Goldberg et. al., (1996) tried to measure the degree of burnout among emergency physicians. Amongst the 1,272 registered doctors, 60% were found in the moderate to high burnout stage. The major correlates of burnout were identified as negative perception of self, negative practice habits and attitudes, unhealthy life styles, lack of job involvement, dissatisfaction with career, high level of alcohol consumption, intent to leave practice within 10 years' and lower level of exercise. Role overload, responsibility, physical environment, reaction and self-care were major predictors for exhaustion. Role insufficiency, role overload and responsibility were major predictors for cynicism. Role insufficiency, social support and rational/cognitive were major predictors for professional efficacy (Zhu et. al., 2006). Bhugra, Bhui and Gupta (2008) had

approached 100 members of Indian Medical Association and Dental College and found that on all three scales of Maslach burnout inventory the participants scored low. Key symptoms of depersonalization and emotional exhaustion were present in less than half of the respondents. They concluded that being in private practice gives professional more control over their job style and may be responsible for low levels of burnout. Female physicians are more likely to experience work family conflict involving incompatible demands. The significant relationship between work-family conflict and emotional exhaustion indicate that physicians who experience greater conflict resulting from performing both work and family roles tend to experience greater emotional exhaustion (Ray & Miller, 1994; Bergman et al., 2008; Fu & Shaffer, 2001).

A small band of scientists on the cutting edge of mind-body research has identified personality traits that enable us to cope effectively with the emotional wear and tear of daily existence. These traits represent facets of our psychological makeup that protect us from internal distress caused by external stress. In the present piece of work the Psychological Immunity Model of Olah (1996, 2000, and 2002) had been used. Olah had defined psychological immune system as "an integrated system of cognitive, motivational and behavioral personality dimensions that should provide immunity against stress, promote healthy development and serve as stress resistance resources or psychological antibodies" This psychological immune system function as a super ordinate system with three interacting subsystem, and each of these three systems has many subsystems (1) Approach Beliefs: This guides the organism's orientation towards the environment. This **subsystem** facilitates the appraisal of the environment as positive, manageable and meaningful or as chaotic and threatening. The subsystems of approach beliefs are positive thinking, sense of control, sense of coherence,

and sense of self growth. (2) Monitoring-creatingexecuting beliefs: This initiates the seeking out and assimilation of information as well as puts into action the necessary to influence and create possibilities within the environment instigate the exploration of the physical, social and intra psychic environments for challenges and new experiences. Its subsystems includes challenge and change orientation, creative self concept, self efficacy and goal orientation, problem solving and social creative capacity (3) Self regulating **beliefs**: This insures the functioning of the rest of the two systems by stabilizing the individual's inner emotional life. Its subsystems incorporate synchronicity, impulse control, emotional control and irritability control.

The studies on psychological immune system as such are not too much. However, studies on different components of psychological immunity are plenty. Olah (2005) delineated that the psychological immune system can be related to burnout in people who are experiencing burnout and report low scores on most of the scales of the Psychological Immune Competence Inventory (PICI). Thus, low burnout should be related to high levels on the self-regulating subsystem and with positive monitoring. Gombor (2009) showed that higher psychological immunity resulted in lower burnout for the Swedish nurses and higher psychological immunity was the best protective factor against burnout and a significant relationship exist between the psychological immune subsystems and personal goals (Voitkâne, 2004). In particular, the approachbelief and monitoring-creating-executing subsystems guide the individual's goal-orientated activity toward the implementation of his or her intentions and toward a positive approach to the utilization of his or her resources. Psychological immune system approach-belief and selfregulating subsystems are strongly linked to depression. The psychological immune system may not work for people who are clinically depressed. The psychological immune system as

the personality factor was selected to reflect the personality dimension related to stress and burnout since it is looking specifically at protective personality resources connected to environmental stress and since it has been shown that certain dimensions of personality might play important role in burnout (Olah, 2005).

Hospital work often requires coping with some of the most stressful situations found in any workplace. Stating about coping with burnout Pareek (1993) has used the anomaly of an electric bulb. Stress according to him, is like electricity, and the person is like an electric bulb. If the voltage is two low (i.e. work under load or hypo stress), the bulb will not glow. If the voltage exceeds the capacity of the bulb the electricity, can burnout the bulb. It is only when the voltage is just right does the bulb function with maximum efficiency. In a study using qualitative method to find out coping strategies used by physicians Lemaire and Wallece (2010) reported five major themes reflecting coping strategies were identified, namely, working through or simply dealing with stress at work , talking with coworkers, taking a time out, using humor and ignoring or denying stress. Markwell and Wainer (2009) reported that spending time with family (30.3%), with friends (29.2%) and exercising (16%) were the most frequently used coping strategies by junior doctors. Sargent et. al. (2004), in their study on orthopedic consultants and residents found that the protective factors included being a parent, spending time with a spouse, having a physician father, and deriving satisfaction from discussing concerns with colleagues, friends, and family and they used theses as coping with stress and burnout.

**The Present Study:** Many recent studies have shown that increasing numbers of physicians and resident doctors are feeling stress and burnout and are feeling dissatisfaction with their professional life (Spickard, Gabbe, & Christensen, 2002; Linzer, Konrad & Douglas 2002; Williams, Konrad & Scheckler, 2001).

Helping professionals such as therapists, social workers and doctors are susceptible to burnout (Minirth et al., 1986). An employee with a positive orientation would be more motivated to dispatch with routine problems on the job, maintain an optimal emotional tone, feel more competent, and be less vulnerable to burnout. Cherniss (1980) believes that "coping with stress depletes psychological energy..... the more stress the helper experiences from any source, the less energy is available for empathy and caring" (p. 19). After analyzing and synthesizing the research evidences the following objectives were framed: (1) To find out the role of psychological resources measured in terms of psychological immune system in specific coping strategies and in attenuating stress and burnout. (2) To examine the coping strategies, which are more used by health care professionals in alleviating their stress and burnout?

## Method

**Sample:** The sample consisted of 200 doctors (158 Male and 42 Female) aged between 30-60 years. They were from the districts of the urban area of Gorakhpur city and Kushinagar. The 100 participants have M.S./M.D. degree either in general surgery, E.N.T., gynecology or in other emergency clinical branches of medicine. The other 100 participants were M.B.B.S. degree holder and are practicing as the general physicians. All the doctors were having degrees in Allopath system of medicine. All of them were married and having children.

**Measuring Tools:** The detailed description of tools have been given below

**Perceived Stress Scale (PSS):** This questionnaire was developed by Cohen (1988). This is a widely used scale to assess perceived stress. It is a measure of the degree to which situations in one's life one appraises as stressful. The scale consists of 24 items. The responses were made on four point scale ranging from (1) does not apply to me to (4) does apply to me. PSS scores are obtained by

reversing responses to the four positively stated items and then summing across all scale items. The validity and retest reliability was sought. The retest reliability after four weeks of interval was found 0.77.

**Burnout:** Burnout was assessed by using Copenhagen Burnout Inventory (CBI). This scale was developed by *Kristensen, Borritz, Villadsen, & Christensen (2005a)*. The CBI is a 19 item self report inventory. The inventory is very easy and fast to respond. The responses were made on a five point scale ranged from (5) Always to (1) Never/almost never. The inventory measures three types of burnout viz. personal burnout, work burnout and client burnout. The Cronbach's alpha for personal burnout was found 0.86, for work burnout was 0.87 and for client burnout 0.85. The inter item correlation ranged from 0.37-0.67.

Psychological Immunity System Inventory (PISI):

This scale was developed by Olah (1995, 2000, and 2004). It has 80 items having sixteen different factors namely, positive thinking, sense of control, sense of coherence, sense of self growth, change and challenge orientation, social monitoring capacity, problem solving capacity, self efficiency, social mobilizing capacity, social creation capacity, synchronicity, goal orientation, impulse control, emotion control and irritability control. These sixteen factors are divided into three subsystems. These are : (1) Approach Belief System which includes positive, thinking, sense of control, sense of coherence, sense of self-growth, (2) Monitoring- Creating-Executing which includes change and challenge orientation, social monitoring capacity, problem solving capacity, self efficacy, social mobilizing capacity, social creations capacity, goal orientation, (3) Self Regulating System which includes synchronicity, impulse control, emotion control and irritability control. The responses were made on a four point scale ranged from (1) completely does not describe me to (4) completely describe me. The reliability of the 16 scales was examined by calculating Cronbach Alpha coefficients and correlation between the scales administered twice to the same participants within an interval of 2 weeks. The Cronbach Alpha was found from .62 to .80 for all the sixteen scales. The retest reliability was found from .77 to .89 for all the sixteen scales. The convergent and discriminate validity was also found high.

Coping Operation Preference Inquiry (Cope-Short Version): It measures the dispositional coping style. The short version of the scale was developed by Carver (1997). Cope consists of 28 items that were divided into fourteen subscales having two items in each scale. Each scale emphasized a particular aspect of coping. This inventory measures a wide range of potential responses to stressors and also distinguishes each coping strategy. Different stressful events bring out somewhat different patterns of responses. Respondents were asked to indicate how they would react to stressors they encountered. They were asked to give, their responses on a 4 point scale as (I) I usually don't do this at all (2) I usually do this a little bit (3) I usually do this a medium amount (4) I usually do this a lot. The Cronbach alpha was .54 to .90 for the fourteen subscales was found. Name of subscales is active coping, planning, suppression of competing activities, restraint coping, seeking social support for instrumental reasons, seeking social support for emotional reasons, focus on venting of emotions, behavioral disengagement, mental disengagement, positive reinterpretation and growth, denial, acceptance, religion, alcohol or drug use and humor.

**Procedure:** The data collection was started with contacting the doctors and taking appointment to take part in the study from their busy schedules. The purpose of the study was disclosed to them. The scales of stress, burnout, psychological immunity and coping strategies were given. After their consent the instructions were read and they were asked whether they were able to understand the instructions. After the completion of data

collection process, each protocol has been rechecked and if there had been anything left or missing, the researcher personally contacted the participants again. The measuring tools were scored in their respective ways according to manual instructions. The data was analyzed with the help of SPSS 16.00 version.

### Results

**Stress-Burnout:** The F-ratio for the main effect of stress (F (df = 1,196) = 35.74, P < .01) was significant. The stress level of GP (M = 62.83) was significantly higher than mean stress of SD (M = 55.97). Similarly, the F-ratio for burnout (F (df = 1,196) = 42.42, P < .01) was also found significant. The mean of burnout indicated that mean for GP (M = 48.57) was higher, than the mean of SD (M = 41.47). These findings display that general practitioners have more stress and burnout than their specialized counterparts.

Stress-Burnout and Coping Strategies: The Fratio for the main effect of all the five coping strategies was significant. The active coping (F (df = 1, 196) = 10.99, P < .01) was used significantly more by GP (M = 33.72) than by SD (M= 31.90). Similarly, adaptive coping (F (df = 1, 196) = 10.08, P < .01) was also significantly more used by GP (M = 20.42) than SD (M = 19.23). Although GP are using these two coping strategies more than SD, the GP (M = 16.42) had also scored significantly higher than SD (M = 12.45) in their use of maladaptive coping strategies (F (df = 1,196) = 59.74, P < .01). At the same time GP (M = 3.89) were also using more alcohol and other such substances (F (df = 1, 196) = 26.59, P < .01) to cope with stress than SD (M = 2.96). And the GP (M = 3.89) were applying humor (F(df = 1, 196) = 8.63, P < .01) as a coping strategy to overcome stress and burnout more than SD(M = 3.31).

**Psychological Immunity:** It was clear from the Fratio of three subsystems of psychological immunity that only for the main effect of Approach belief (F(df=1,196)=7.40, P<.01) was significant. The Approach belief level of GP (M=65.35) was higher than the mean of SD (M=61.99). This indicates that in comparison to specialized doctors, the General Practitioners have high level of stress and burnout on the one hand and the approach belief psychological resource on other hand. However, the main effect of other two subsystems of psychological immunity i.e. monitoring and self regulating was not found significant.

**Relationship in Psychological Immunity and Coping Strategies:** The coefficient of correlation was also computed to find out the relationship in psychological immunity domains and different coping strategies used by the participants. In the GP active coping was found to be significantly

and positively correlated with all the three subsystems of psychological immunity, namely, approach belief  $(r = .025^{**})$ , monitoring  $(r=0.24^{**})$  and self-regulation  $(r=0.24^{**})$ . The similar, pattern was found for SD. In the SD active coping was also significantly and positively correlated with approach belief  $(r = 0.26^{**})$ , monitoring  $(r = 0.41^{**})$  and self regulation  $(r = 0.23^{**})$ . Apart from active coping strategies only in GP two coping strategies namely, maladaptive coping  $(r = 0.28^{**})$  and substance use( $r = 0.22^{**}$ ) had been found significantly and positively correlated with self regulation subsystem of psychological immunity scale (Table 1).

Table 1: Coefficient of Corre	elation in Psychological Im	munity Systems and Coping Strategies
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Domains of		Coping Strategies				
Psychological Immune System	Groups	Active coping	Adaptive coping	Maladaptive	Substance Use	Humor
Approach Belief	GP	.25**	.12	.09	.15	.012
	SD	.26**	.14	.07	.09	.02
Monitoring	GP	.24**	.15	.01	.07	.07
	SD	.41**	.16	.005	.04	02
Self Regulation	GP	.24**	.18	.28**	.22**	.15
	SD	.23**	.15	.03	02	.10

**Note:** P< .01\*\*, P< .05\*

**Predictive Power of Psychological Immunity**: To find out the contribution of psychological immunity in application of a particular coping strategy the stepwise multiple regression analysis was made.

Predictors	Groups	R	R2	R2 Change	Beta	t	F
Self Regulation	GP	.25	.063	.063	.25	2.57**	6.61**
Monitoring	SD	.27	.072	.072	.27	2.76**	7.64**
Criterion Varia	ble –Malada	aptive Copin	ng Strate	gies			1
Self Regulation	GP	.28	.077	.077	28	2.88**	8.29**
Criterion Varia	ble –Substa	nce Use Cop	ing Stra	tegies	1	1	1
Self Regulation	GP	.23	.052	.052	.23	2.33**	5.45**

Table 2: Coping strategies as predicted by Subsystems of Psychological Immunity

**Note :** P < .01\*\*, P < .05\*

Self Regulation domain of Psychological Immunity was the best predictor for the use of active coping strategies (beta value 0.25) and maladaptive coping strategies (beta value -0.28) in GP group. However, in the SD group Monitoring psychological immune system had positively and significantly predicted active coping strategies (beta value 0.27). In GP group substance use coping strategy was also significantly and positively predicted by self regulation immunity system (beta value 0.23) (Table 2).

## Discussion

Doctors being an integral part of the society, provide health care services to the community. The present investigation was aimed to find out the role of psychological resources assessed as psychological immune system in effectively coping with stress and burnout. The findings indicated that the doctors commonly experienced burnout. Measuring burnout among doctors is important because their well-being has implications for stability in the health care provider workforce and for the quality of care it provides to patients. This study found a high degree of stress and burnout among general physicians. The lack of association between stress and burnout with any demographic factors, including age, sex, practice experience, or type of remuneration, suggests that all medical practitioners are vulnerable. Burnout might not be due to demographic factors, but could be due to practice or personal issues.

Generally, the studies had indicated that the doctors' with specialization report more stress and burnout than the doctors having only bachelor degree in medicine and not frequently involved in emergency care (Goldberg et.al, 1996). However, in the present investigation the results are contradictory to some of the earlier research findings. Doctors in general practice have more stress and burnout than their more specialized counterparts who are frequently involved in emergency and critical care. The reasons for this as given by general practitioners were related to both work and family (Shahi, 2011). The work related causes were poor working conditions, work and patient overload and overall malfunctioning health care system. These factors are major sources of stress and over a period of time, these stressors have made a cumulative impact and the doctors feel burnout (Shahi, 2011).

The respite in the scenario is the psychological

immune system of doctors. It is conceived that like physical immune system, there abide a psychological immune system in our body. Both of the systems works together to defense protect, and intact physical and mental health. There are very busy surgeons and emergency care doctors who were highly satisfied with their life and evaluate their life as full of quality. Now, the question is what constitutes these doctors to not sway by stress and lead to burnout. The answer lies in their psychological immune system. The psychological immune system is the integrated system of cognitive, motivational and behavioral personality dimensions. This optimizing system brings a balance between personality functioning and environmental (Social and physical) demands in order to heighten the adaptive expedience. Present findings indicate that in comparison to specialized doctors, the general practitioners have high level of stress and burnout on the one hand and the approach belief psychological resources on others hand. The main effect of others two subsystems of psychological immunity i.e. monitoring and self regulating was not found significant.

The approach belief psychological immune system reinforces the appraisal of environment as positive, amenable, significant and meaningful or as chaotic, threatening and burdensome. The facets of approach belief orientation incorporates positive thinking, sense of control, coherence and self-growth, change and challenge orientation, creative self concept, self efficacy and goal orientation. Considering all these facets, it is very much apparent that although the general practitioners had high level of stresses but these psychological immune system in general and approach beliefs subsystem in particular is scaffolding them not to succumb in the grip of stress and in turn to burnout. The research evidences, separately had shown the significant safe guarding and preserving effects of positive thinking (Snyder et al, 1998), problem solving (Snyder, Harris et, al 1991), self efficacy (Bandura, 1986, Dweck, 2000), challenge

orientation (Judger, 2000) and sense of control (Rothbaum, Weisz & Snyder, 1982, Abeles. 1991, Peacock & Wong, 1996; Menec & Chipperfield, 1997) etc. in different groups of participants.

The general practitioners and specialized doctor's are significantly different regarding the effect of approach belief psychological immune system, however, for the effect of two other subsystems of psychological immune system, namely monitoring and self-regulation, they are the same. As Olah (2000) pointed out that these two subsystems of psychological immunity encourage the individual to assimilate the necessary information and cultivate the opportunities within their environment and the self regulation enable the individual to stabilize the inner emotions. Most people are very conscious about their psychological immune system. The psychological immune system shelters people from the worst effects of their misfortune. These findings have clearly suggested that approach belief psychological immune system is detrimental in attenuating stressburnout.

The relations in psychological resources and different coping strategies used by the participants in the two groups of doctors are different. In their application of active, adaptive, maladaptive and substance use coping strategies, general practitioners are using both the positive or effective strategies like active and adaptive coping and less effective strategies like denial or self blame or substance use significantly more than specialized counterparts. The Psychological immune system offers one potential description of a protective apparatus that may be influential in the process of adoption and coping. The psychological immune traits enable the individual to handle stress more effectively. The psychological immune system (PIS) have a rich variety of components, e.g. positive agency believer like self efficacy, sense of control, etc. and favorable expectations about future changes

like hope, sense of coherence etc. Besides these PIS functioning is an optimizing dynamic interaction of the intersystem units. It means that the components balanced each other at optimal level. The PIS creates a balance within the personality between the facilitating and inhibiting factors and also makes balance between personality functioning and the environmental. social and physical demands increasing adaptive fitness (Oláh, 2004). The present results showed that the psychological immune system had emerged as best predictor for the use of active strategies, maladaptive coping strategies, substance use coping strategies with the variance ranging from 7% to 10% in high stress general practitioners. This signifies that participants who had a strong psychological immune system were less affected by stress and in turn to burnout. Based on the review of literature and present findings we are of the opinion that stress affects the efficiency and performance of the doctors working in hospitals. Doctors need to manage professional and personal stress to maintain their own health and well being and to maximize their ability to provide quality health care of their patients and inculcating and enhancing psychological immunity is one such strength to manage stress and burnout.

The results revealed that in the application of coping strategies, the general practitioners and specialized doctors are significantly different. The general practitioners are using more active coping and adaptive coping strategies on the one hand and maladaptive coping and substance use on the other. The coping skills of individuals are usually tested in difficult problems and adverse circumstances. These findings are quite interesting as we earlier reported that general practitioners have stated more stress and burnout than their specialized counterparts. Furthermore, they are utilizing their approach belief immune system more than specialized doctors. This immune system is working as a buffer and reduces the impact of stress-burnout and orient them to apply problem focused coping strategies as

planning, problem solving, positive reinterpretation of the situation etc. And where the application of active coping strategies is not beneficial they go for adaptive coping strategies like seeking instrumental and emotional support and looking respite in religion. Since they perceive more stress and overall burnout. therefore, many a times they indulge in substance use and maladaptive coping strategies like denial, behavioral and mental disengagement, self blame etc. Substance abuse can be broadly defined as the use of alcohol, narcotics, or any of a wide array of potentially consciousness-altering substances (legal and illegal) which impair a person's ability to function responsibly in their professional or personal life. Substance abuse, including excessive alcohol consumption or the abuse of illicit substances may exacerbate the situation, although people frequently turn to these substances to aid their coping skills. Alcohol has well documented negative consequences in terms of health, both physical and mental. In the last decade, India has seen many societal changes that have influenced the context and nature of drinking, and increased alcohol-related harm. Social drinking has been in incremental mode. The adaptive coping strategies and substance use were found to be negatively correlated with stress and burnout in specialized group.

#### Conclusion

Burnout is highly prevalent among health professionals, especially among general practitioners (M.B.B.S). General practitioners, regardless of their demographic characteristics, are at risk of burnout. In these times of high stress rates in the profession, it is important for all physicians to become aware of the problems that can arise from stress and burnout. Personal and occupational strategies for coping with stress are associated with a reduction in burnout and are, therefore, highly recommended. The results of this study lead us to recommend the most frequently cited coping strategies: planning,

confrontation of problem and seeking emotional and instrumental support. The study also recommends scheduling intervention programs for doctors to minimize the use of substances as a coping strategy. Early interventions programs may ensure that practicing doctors in trouble get help in time, before problems interfere with care of patients and give rise to medical errors. The most significant finding of the investigation is the identification of protective function of psychological immune system. The study offer new hope that our own psychological resources can be activated to prevent stress and burnout and to heal every organ and system of the body. Psychologists have long documented the role of healthy traits in maintaining a healthy state of mind. Individual practitioners have a responsibility to pay close attention to their own health and well-being. Those caught up in their work, enduring long hours, fatigue, and multiple responsibilities might fail to see that their own behavior or emotional state is putting themselves, and potentially others, at risk.

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