The effective coping strategies against burnout: Perceptions of Pakistani medical students.

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Abstract
Objective: To explore effective coping strategies used by medical students against burnout.
Method: The mixed method study was conducted at the Al Mizan campus of Riphah International University, Rawalpindi, Pakistan, from March to August 2018, and comprised fourth and fifth year medical students of both genders. Data was collected using the Maslach burnout inventory, which was followed by focus group discussions. Data was analysed using inductive approach.
Results: Of the respondents, 34 (23.4%) were males and 111 (76.5%) were females. Overall, 84 out of 151 (56%) students scored high on emotional exhaustion scale, 35 (23%) scored moderate and 32 (21%) scored low. On the cynicism scale, 93 (63%) out of 147 scored high, 47 (32%) scored moderate and 7 (5%) scored low. On professional efficacy, 42 out of 149 (28%) students scored low, 74 (50%) moderate and 33 (22%) scored high. Seeking emotional support for coping was very common. Parents played the main role in providing support to the students. Turning to religion, acceptance and venting were also common coping strategies.
Conclusion: Emotional exhaustion and cynicism were found in majority of the sample comprising medical students, seeking emotional support was common as a coping strategy.

Keywords: Burnout, Coping strategies, Medical students, Maslach burnout inventory. (JPMA 71: 1583; 2021)
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Introduction
Being a doctor in today’s world can be incredibly rewarding and challenging at the same time.¹⁶ The process of medical education, particularly undergraduate medical education, is notorious for being emotionally taxing. Medical students all over the world undergo intense and difficult examinations to become doctors.²⁷ In addition to the academic pressure, social, personal and financial problems can all lead to students suffering from a lot of stress.³³

The term burnout was first introduced by psychologist Herbert Freudenberger. This term was initially used to describe stress related to service professions. Shortly afterwards, the Maslach Burnout Inventory (MBI) was generated by Christina Maslach in which burnout was characterised as a psychological syndrome comprising three scales; emotional exhaustion (EE), depersonalisation (D) and reduced personal accomplishment (RPA).⁴⁴

Burnout has a lot of adverse consequences for people suffering from it, including a decrease in overall job performance,⁵ lower level of commitment, and other stress-related health issues. As a doctor, the consequences of burnout affect not only the physicians but also their patients.⁶ Burnout ultimately affects the quality of patient care by decreasing empathy and compassion of the physician.⁷ It also increases physicians’ tendency to commit medical errors.⁸ As the burnout of a physician affects the healthcare system, a lot of research is being done to determine the prevalence of burnout at the students’ level,⁹ showing high prevalence. In Pakistan, one study in Lahore reported that 30.6% of medical students had high levels of burnout.¹⁰ To understand burnout better, it is important to understand the factors that may play a role in its manifestation.

Coping strategies can be defined as the behavioural or psychological efforts employed by an individual to minimise or control stressful events.¹¹ When considering the factors which affect burnout, coping strategies have an impact on its manifestation.

A study broadly classified coping strategies into problem-focussed and emotion-focussed coping. Problem-focussed coping involves efforts to change the situation by problem-solving, making decisions or by taking direct action. On the other hand, emotion-focussed coping involves regulating the distressful emotions related to the situation without actually changing the situation.¹² How an individual copes is not only affected by his assessment of the situation, but also by the available resources, the use of which may be approved or prohibited by cultural values and norms. It is also important to consider that different cultures differ with regard to environmental demands, social structures and

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their religious beliefs which may affect the coping pattern of its individuals. Most of the studies on coping strategies have been performed in the West which means our understanding of coping is mostly based on such concepts and individuals, whereas a few studies conducted across different cultures have shown variations in coping behaviours.

The current study was planned to explore effective coping strategies used by Pakistani medical students against burnout.

Subjects and Methods
The mixed method study was conducted at the Al Mizan campus of Riphah International University, Rawalpindi, Pakistan, from March to August 2018. After approval from the institutional ethics review committee, the sample was raised using census sampling technique from among medical students of fourth and fifth years. The After informed consent from the participants, quantitative data was collected using the MBI-General Survey (MBI-GS). MBI-GS was scored on a seven-point Likert scale ranging from 0 to 6. The scores of each subscale were calculated and interpreted separately. The items were not combined to form a single burnout score as it was suggested not to do so in the MBI manual. The reliability of scores for each subscale was calculated and it was 0.806 for EE, 0.60 for cynicism (C), and 0.82 for professional efficacy (PE). Cut-off scores for low, moderate and high burnout levels (Table 1) were determined in the light of similar studies.

One week after administering the questionnaire individual, forms were collected and scored. Students were classified into two low burnout and high burnout groups, followed by focus group discussions (FGDs) and interviews with each group. The participants were invited through social media to attend. The FGDs were conducted on the campus and at the Pakistan Railway Hospital, Rawalpindi, while interviews were conducted at the latter only. Each FGD had 6-7 participants. Each FGD lasted 1.5-2 hours while the interviews lasted 40 minutes.

FGD data was analysed using an inductive approach. The whole process was iterative, requiring the need to go back and forth between data collection and analysis. The data was first organised on the computer folder assigning numbers to each FGD. Each FGD was transcribed by listening to the audio recordings and comparing field notes taken during the interview. It was analysed manually, and member checking was also done.

Results
Of the 200 students, 145(72.5%) responded, and, among them, 34(23.4%) were males and 111(76.5%) were females. (Table 2). Mean values and standard deviation for the three subscales were noted (Table 3).

Based on the cut-off values, 84 (56%) students had high EE levels, 35 (23%) moderate and 32(21%) low. On the cynicism subscale, 93 (63%) scored high, 47(32%) scored moderate and 7(5%) scored low. On the professional efficacy subscale, 42(28%) students scored low, 74(50%) scored moderate and 33(22%) scored high. Students with high scores on EE and cynicism, and low scores on professional efficacy were considered cases of burnout.

FGDs with high and low burnout cases led to different codes and themes in terms of coping strategies.

Students reported that they turned towards religion in times of stress. Regardless of the level of burnout, majority of students mentioned some form of religious coping in times of stress.

Seeking support from parents was used as a means of coping with stress in high burnout group. Venting out and crying was another coping mechanism in female students of high burnout group. This was particularly seen in students who were hostelites and those who were quieter during FGDs. Students in this group also mentioned activities like running, walking, listening to music or some form of physical exercise to take their mind off the source of stress. Besides, isolation, suppression, acceptance and self-blame were seen as a means of coping with stress and burnout in this group (Table 4).

Turning to religion was the most common coping strategy...
in the low burnout group. Different from the other group, students in this group mostly relied on friends in times of stress for support. Students mentioned seeking the help of friends and seniors and from people who had experience in dealing with such issues, such as their teachers. Avoiding activities like television or watching movies was also mentioned in this group. However, this was not the case for all students and some students even thought that watching movies as a break from the study routine helped them to relax. Planning ahead was reported by students in this group. Steps like setting up time tables or schedules or mentally setting up goals were a means by which students coped. Students in this group were more involved in extracurricular activities. Students participating in these activities appeared more relaxed and confident during FGDs. Some students in this group mentioned positive reframing to cope with stressful events, saying they always tried to look for the positive aspect of things and that it helped them cope (Table 5).

| Table 4: Themes for high burnout group. |

<table>
<thead>
<tr>
<th>Quotations</th>
<th>Codes</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(FG5 HBS1) “Whenever I am stressed I pray a lot, sometimes I cry, once I let out my frustration I feel better.”</td>
<td>- Crying and letting emotions out</td>
<td>Venting</td>
</tr>
<tr>
<td>(FG5HBS2) It is the environment of my hostel that bothers me the most, I am very fed up but then I think about my parents’ expectations and try to counsel myself that what is done is done.</td>
<td>- Fear to disappoint</td>
<td>Acceptance</td>
</tr>
<tr>
<td>FG5HBS3 “What gets me through is my mothers’ anger and my father’s hopes. During times of stress I need my mother’s support so I call her to my side”</td>
<td>- Parental expectations</td>
<td>Seeking emotional support</td>
</tr>
<tr>
<td>FG5HBS6 “I just work hard and leave the rest to Allah.”</td>
<td>Having faith in Allah</td>
<td>Turning to religion</td>
</tr>
<tr>
<td>FG5HBS7 “I go into isolation, pray more than usual, go for hiking alone.”</td>
<td>- Spending time alone,</td>
<td>Turning to religion</td>
</tr>
<tr>
<td>FG5HBS6 I smoke when I am stressed...my smoking has increased a lot ever since I came here.</td>
<td>Praying more than usual</td>
<td>Isolation</td>
</tr>
<tr>
<td>FG5HBS4 “I try to suppress my emotions as much as I can because I am shy and don’t want to share my feelings with anyone”</td>
<td>Suppression of emotions</td>
<td>Suppression</td>
</tr>
<tr>
<td>FG4HBS3 “I am very family oriented...and because I have to live in a hostel it is a source of great stress for me. I didn’t want to do MBBS but it was my mother who wanted me to be a doctor. Whenever I feel stressed I pray and make dua a lot and read the Quran. I have great faith in Dua’.”</td>
<td>- The need for support of family</td>
<td>Turning to religion</td>
</tr>
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<td>FG4HBS4 “Whenever I am stressed I always think to myself that Allah has mentioned in the Quran that the time that is coming is better than the time that has passed and also that Allah never puts any burden on a person that he cannot endure.”</td>
<td>- Praying more than usual in times of stress</td>
<td>Emotional support</td>
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<td></td>
<td>- Making dua</td>
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<td>- Reciting Quran</td>
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<td>- Depending on Allah in times of stress</td>
<td>Turning to religion</td>
</tr>
</tbody>
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| Table 5: Themes for high burnout group. |

<table>
<thead>
<tr>
<th>Themes for low burnout group</th>
<th>Codes</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG3LBS2 “I always set up a time table before an exam and focus on it.”</td>
<td>Making timetable and schedule</td>
<td>Planning</td>
</tr>
<tr>
<td>FG3LBS6 “I try to do difficult things first because I have more energy and better momentum in the beginning...then after 2-3 hours when I feel saturated...I shift towards easier stuff.”</td>
<td>Strategic study</td>
<td>Planning</td>
</tr>
<tr>
<td>FG3LBS3 “In this field of medicine...in this, stress is a part of our daily routine, so, what I do is take breaks, go out with friends so you feel a little fresh after meeting your friends, also friends help out in studies.”</td>
<td>Taking breaks, going out with friends, taking friends help</td>
<td>Seeking social support for instrumental reasons</td>
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Discussion
The current study is one of the few that have been done in Pakistan regarding burnout in medical students and, to our knowledge, the first to explore coping strategies against burnout in medical students of Pakistan. MBI-GS scores showed that more than 50% students scored high in at least two subscales. These figures are comparable to studies conducted worldwide on medical students.\(^\text{15,16}\)

When looking at the coping strategies commonly used by medical students in the current study, turning to religion was found to be the most commonly used strategy in both the groups. However, students with low burnout levels were seen to have a more personal relationship with Almighty which they mentioned in their interviews and FGDs.

Empirical studies have shown that many people turn towards religion when faced with testing circumstances.\(^\text{17}\) Most of the research on religion as a means of coping conceptualises it into two distinct dimensions, which are positive and negative. Positive religious coping involves trusting or having faith in God and having a connection, while negative religious coping involves a less secure connection with God and includes feelings of being abandoned by God. The use of positive religious coping has been associated with increased levels of well-being.\(^\text{18}\)

Another important coping strategy used by medical students was seeking support of friends and family. There was a distinct difference between the two groups in terms of their support-seeking styles. In the high burnout group, almost all students reported their parents as the main sources of support. On the other hand, students with low levels of burnout relied on their friends and mentors.

Literature reveals that seeking social support can be both for emotional and instrumental purposes. Seeking support for emotional reasons involves getting moral support, understanding or sympathy from someone and is an example of emotion-focussed coping, where the main objective is to deal with the emotion related to the stressful circumstances, whereas seeking instrumental support includes seeking advice or assistance from someone. This is an example of problem-focussed coping as the main focus of seeking advice is to address the problem directly.\(^\text{19}\)

Students in low burnout group frequently used instrumental support as a coping strategy, whereas the high burnout group mostly used emotional support. Seeking social support has been found to be positively associated with resilience, and negatively with burnout. Resilience can be defined as the dynamic capability which allows an individual to rise up to challenges given appropriate social and personal contexts.\(^\text{20}\) Studies have shown that students with strong social support are more resilient in the face of stressful events.\(^\text{21}\)

Planning and active coping were also used by students with low levels of burnout. Both of these are included in problem-focussed coping. Planning involves thinking of appropriate steps to deal with a stressor while coming up with action strategies. Taking the necessary steps to deal with the stressor is active coping.\(^\text{19}\)

Listening to music and participating in extracurricular activities was another coping strategy used by low burnout students. A study on medical students in Saudi Arabia to determine effects of extracurricular activities on burnout levels showed students who took part in organising and leading extracurricular activities had high professional efficacy.\(^\text{22}\) A study conducted in Lebanon on pre-clinical medical students for association of burnout with extracurricular activities divided extracurricular activities into four categories, namely physical activity, reading, listening to music and social activities. It was seen that listening to music was associated with low professional efficacy.\(^\text{15}\) This was not the case with the current study’s sample, and perhaps the different results may be contributed to the fact that the study in Lebanon comprised pre-clinical students who have more theoretical burden of studies compared to the more practical clinical years which leaves lesser time for extracurricular activities.

In the current study, positive re-interpretation and venting of emotions was also seen as a coping strategy for students with low burnout. This was not used commonly, but was found in a few students. Both of these are examples of emotion-focussed coping.

The current study has its limitations As it was conducted at a single centre and only included fourth and fifth year students with a higher number of female students which meant no comparisons could be made on the basis of gender. Besides, the response rate was low as at the time of data collection, supplementary papers were being held on the campus.

Despite the limitations, however, findings suggest there is a need to develop programmes for promoting social support of friends and peers as well as use of approach-based coping strategies of which medical students should also be a part. These may include peer-to-peer (or ‘near peer’ by senior students) support by students themselves in the form of formal or informal mentoring. The involvement of medical students should also be given
importance along with the faculty in developing such programmes. These programmes should be regularly reviewed and feedback should be obtained from students leading to further improvement and wellbeing of students.

Promoting extracurricular activities can help generate wellness and decrease stress levels of medical students. Finally, knowing what we do about how students use religion to cope with stress and burnout, efforts should be made to create awareness on how to use religion positively for dealing with difficult circumstances and how to incorporate it in our daily life.

Conclusion
Students with low levels of burnout more commonly used problem-focussed coping strategies, such as planning, seeking instrumental support, positive reinterpretation, and, to a lesser degree, emotion-focussed coping strategies, like venting, acceptance and suppression. Using religion to cope was common to both groups.

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