Original Article www.pimr.org.in

DOI: 10.47799/pimr.1003.07

Self Directed Learning Readiness among phase I undergraduate Medical students

Afshan Kausar[1], Akshay Berad[2]*

[1]Associate Professor,Department of Physiology, JIIUS Indian Institute of Medical science and research, Jalna, Maharashtra
[2]Associate Professor, Department of Physiology, Chalmeda Anand Rao Institute of Medical Sciences, Karimnagar, Telangana

Corresponding Author:
Akshay Berad, Associate Professor, Department of Physiology, Chalmeda Anand Rao Institute of Medical Sciences, Karimnagar, Telangana
E-MAIL: akshay_berad@rediffmail.com

Date of Submission: 19/02/2022 **Date of Review: 25/05/2022** **Date of Acceptance: 19/04/2022**

ABSTRACT

Self Directed Learning (SDL) was defined by Knowles as 'the process in which individuals take the initiative themselves with or without taking help of others for diagnosing their learning needs. The SDLR Scale is a validated tool used to assess that to which extent an individual possesses self-directed learning personality characteristics and attitude. This cross sectional survey was planned among phase I medical students . Sample size was 100 utilizing convenient sample of phase I medical students. Structured Questionnaire 'Self-directed learning readiness scale' SDLRD questionnaire was used to collect the data; the scale was first designed and tested by Fisher et al. Data were analyzed using Microsoft excel, Median, mean and Standard deviation for each individual item and for total score as well as for the three subscales were tabulated . Differences between groups were tested using the chi square or t test. The mean and median SDLR score of whole questionnaire for was 146.18±19.81. Majority of the first year medical students had shown readiness for self-directed learning. SDL scores were lower among our MBBS students than reported in studies done elsewhere. This study points out the need to address our students' SDL skills, and need for ways to build SDL skills in our students.

KEYWORDS: Self Directed Learning, Readiness, Medical students Introduction;

INTRODUCTION;

Self Directed Learning (SDL) was defined by Knowles as 'the process in which individuals take the initiative themselves with or without taking help of others for diagnosing their learning needs, formulating learning goals, identifying resources both human and material, selecting & implementing appropriate learning strategies and evaluating learning outcomes. [1]The self-directed learners take responsibility of making decision of what to learn & to which extent. Besides they accept the freedom to learn what they feel & think is essential for themselves. [2] The extent of control over their own learning will depend on learners approach, attitude, ability, aptitude and personality characteristics.The practice of medicine in recent era entails; experience, accurate & precise application of critical thinking skills, and self-efficacy. With the rapid expansion of knowledge, rapid shift in the health care system and the intricacies of reflective practice; it is mandatory that medical practitioners must develop the ability to be self-directed learners to facilitate growth as professionals and to offer the premier quality of patient care. [3]Thus SDL must be incorporated at all levels of medical education. Accordingly, the new UG curriculum competency based medical education (CBME) implemented in India from 2019 have recommended SDL as one of the most vital principle of medical education. The broader goal of CBME is creating students as 'lifelong learners'. It has been suggested that, SDL must be employed regularly to incorporate lifelong learning skills in UG students. [4]

Students enrolled in this innovative curriculum come from different cultural, educational and social backgrounds that may possibly influence their readiness to SDL to certain extent. Hence, the evaluation of students "SDL readiness" is regarded as a key indicator in the monitoring of CBME curriculum and will be helpful for highlighting area for improvement. Thus, through this background the study was designed to explore the SDL readiness of phase I medical undergraduates.

The SDLR Scale is a validated tool used to assess that to which extent an individual possesses self-directed learning personality characteristics and attitude. The scale developed by Fisher in 2001 established construct validity and internal consistency by a pilot study among undergraduate nursing students. [2] The scale has since been construct validated and content for medical students [5, 6] and therefore was used in present study.

MATERIAL AND METHOD

Study Design and study setting: This cross-sectional survey was planned among phase I medical students.

Sample size was 100 utilizing convenient sample of phase I medical students.

Data Collection Tool: Structured Questionnaire 'Self-directed learning readiness scale' SDLRD questionnaire was used to collect the data; the scale was first designed and tested by Fisher et al. in 2001.[2] This Self-perception scale was in English language. It has 40-items grouped under three subscales; self-management (13 items), desire for learning (12 items) and self-control (15 items). The student's responses to 36 items were collected on a 5-point Likert scale, where 5 indicated strongly agree and 1indicated strongly disagree. The rest four items (3, 11, 20 &40) were scored in reverse order.200 was the maximum score and 40 were minimum. The criteria of readiness for SDL is categorized as 'high readiness' for scores >150 and 'low readiness' for scores <150.

Inclusion criteria

1. Those Students who were willing for participation in the study voluntarily with consent

2. Those who were present at the time of data collection of study.

Exclusion criteria

1. Students who were absent at the time of data collection the study.

2. Who were not willing to be participant of the study.

Data collection; the researcher had explained objectives and purpose of the study to the 100 Students, assembled in lecture hall. The data was collected in November 2021. The informed consent was obtained from them. Detailed instructions on how to complete questionnaire were given .Afterwards demographic and other variable's information were collected through self structured questionnaire. SDLRS instrument was distributed and students were asked to choose the response felt by them. Students were also assured on confidentiality and that no harm or legal consequences will issue regarding the outcomes of the study.

Data Analysis: Data were analyzed using Microsoft excel. Median, mean and Standard deviation for each individual item and for total score as well as for the three sub-scales were tabulated

Differences between groups were tested using the chi square or t test.

RESULTS

Although 100 students had participated the study but response rate was 97%, as 3 students had not returned the filled questionnaire. Mean age of the participants were 18+1.37years . Among these 47 % were male 53 % were female.Figure 1 The mean and median SDLR score of whole questionnaire for was 146.18±19.81 and 147.table 1 shows the mean and sd of all the three domains. 53% students were identified with score more than 150 and therefore were included in high readiness category; whereas 47% had scores less than 150 and were recognized as low readiness.Figure 2 gender distribution of readiness is shown inFigure 3. The difference is significant.

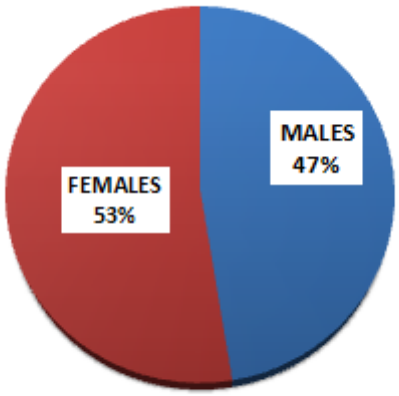

Figure 1: Gender distribution of participants.

SDLR Domains	Mean score (±SD)
Over all SDLR score	146.18±19.81
Self-management(SM)	42.63±6.13
Desire for Learning (DL)	44.36±7.91
Self-control (SC)	56.36±7.39

Table 1: Mean score of SDLR Domains

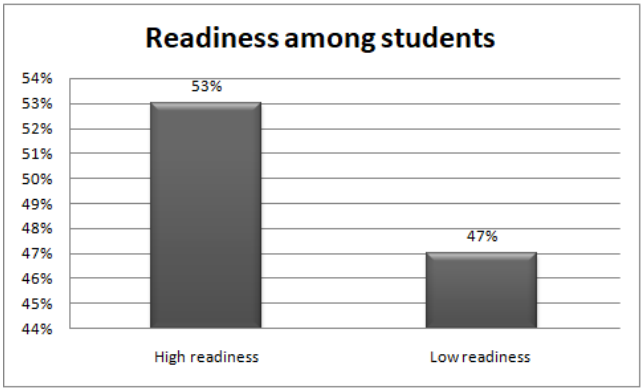

Figure 2: Readiness of Students.

DISCUSSION

Lifelong self- directed learning (SDL) has been identified as an important aspect of medical education. Furthermore,

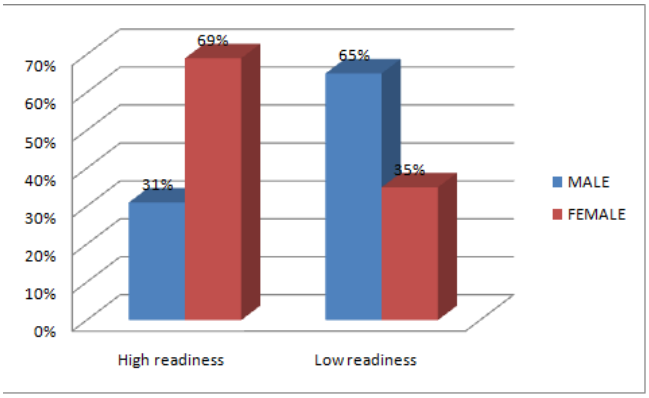

Figure 3: Gender distribution of readiness

even the brightest and most motivated students might find SDL as a challenging task. [7] Thus in view of this fact present study was planned to assess preparedness of medical graduates for such method of learning i.e. SDL readiness. In the present study mean and median SDLRS scores of 100 medical students was 146.18±19.81 and 147 respectively. 53% of the respondents scored >150 and were categorised as 'highly ready for SDL'. The scores were comparable to other study by Balamurugan et al. [8](2015) who reported a mean SDLRS score of 145.2± 16.7 median 148, but showed only 39.7 30% in the high readiness category for first year medical student. Slightly higher SDLR scores 51.4 were reported by Abraham et al. [9] done in 2011 at Manipal among first-year MBBS students. Furthermore 152.7 score was shown in first year MBBS students by Shankar et al. 2011 at Nepal. [5]The present study documented that among the three attributes of SDL, self-control subscale scores were highest compared to desire for learning and self-management. Regarding the self-control this high result was quite encouraging. It was a sign of immense self-reliance and maturity of students. This inclination is comparable to study of Madhavi et al [10] showing highest scores for self control among medical undergraduate. In contrast to this,in the study of saudia Arabia undergraduate showed highest scores for desire for learning. [11]Based on the results of the present study, it is pointed out that students need support for improvement of self-management skills. Particularly they need advice in; proper planning for utilization of available resources, executing plan, managing time and developing systematic methodology for learning. It is recommended that action plans should be brought into play to build up self management skills of first year medical students. Further improvement in the self-management skills needs, might be accomplished through multidisciplinary approaches. It can be achieved by creating innovative medical education methodology like, problem-based learning, case based learning, mind mapping etc. Moreover, the cbme curriculum had shifted traditional teacher centered learning towards learner centered, accentuated emphasis on self-directed learning.

Thus, The SDLRS scale supports medical educationalists in assessing students' learning needs, and accordingly modifying & implementing teaching strategies appropriate to the students needs. Besides readiness assessment may contribute in furnishing essential data for curriculum development. [9]

Limitations of the Study: Being a cross-sectional study; the study is unable to document the changing trend of sdl readiness over a specified period.

Conclusion: Majority of the first year medical students had shown readiness for self-directed learning, but some lag behind. The highest scores were documented for scores for'self-control' sub scale followed by 'desire for learning' , the lowest scores for 'self-management' necessitate attention on this skill by teachers. Furthermore, students SDL needs could be addressed through multidisciplinary approaches SDL scores were lower among our MBBS students than reported in studies done elsewhere. This study points out the need to address our students' SDL skills, and need for ways to build SDL skills in our students.

REFERENCES

1. Knowles MS. Application in continuing education for the health professions: chapter five of "Andragogy in Action". Mobius. 1985;5(2):80–100.
2. Fisher M, King J, Tague G. Development of a self-directed learning readiness scale for nursing education. Nurse Educ Today. 2001;21(7):516–525.
3. Ainoda N, Onishi H, Yasuda Y. Definitions and goals of "self-directed learning" in contemporary medical education literature. Annals of the Academy of Medicine Singapore;34:515–519.
4. Competency Based Undergraduate Curriculum for the Indian Medical Graduate. MCI; Medical Council of India (MCI;1.
5. Shankar P, Bajracharya N, Gurung S, Ansari S, Thapa H. Change in Medical Students' Readiness for Self-directed Learning after a Partially Problem-based Learning First Year Curriculum at the KIST Medical College In Lalitpur. Nepal, Education for Health. 2011;11(2):1–10.
6. Hendry G, Ginns P. Readiness for self-directed learning: Validation of a new scale with medical students. Medical Teacher. 2009;31:918–920.
7. Harvey BJ, Rothman AI, Frecker RC. Effect of an undergraduate medical curriculum on students' self-directed learning. Acad Med. 2003;78(12):1259–65.
8. Balamurugan S, Kumar H. Self-directed Learning Readiness (SDLR) among Medical Students: A Questionnaire-Based Study from an. Indian Medical School South East Asian Journal of Medical Education. 2015;9(2).

9. Abraham RR, Fisher M, Kamath A, Izzati TA, Nabila S. Atikah.Exploring first-year, undergraduate medical students' self-directed learning readiness to physiology. Advanced Physiology Education. 2011;35:393–395.

10. Madhavi K, Madhavi BD. Readiness for self-directed learning among undergraduate medical students of Andhra Medical College, Visakhapatnam. Int J Community Med Public Health. 2017;4:2836–2876.

11. Soliman M, Al-Shaikh G. Readiness for self-directed learning among First Year Saudi Medical students: A descriptive study. Pak J Med Sci. 2015;31(4):799–802.

How to cite this article: Kausar A, Berad A. **Self Directed Learning Readiness among phase I undergraduate Medical students**. Perspectives in Medical Research. 2022;10(3):39-42
DOI: 10.47799/pimr.1003.07