Social Medicine
Health For All
ISSN: 1557-7112

ORIGINAL RESEARCH

Quality of family communication patterns among medical students at LNMC

Calidad de los patrones de comunicación familiar entre estudiantes de medicina en la FNML

Ramsha Saeed Khan. Liaquat National Hospital and Medical College, Pakistan.
Email: kramsha653@gmail.com, https://orcid.org/0009-0000-5415-3537
Ramsha Jamal. Liaquat National Hospital and Medical College, Pakistan.
Email: ramshajamal20@gmail.com, https://orcid.org/0009-0000-8221-6654
Nashrah Nadeem. Liaquat National Hospital and Medical College, Pakistan.
Email: nashrahnadeem786@gmail.com, https://orcid.org/0009-0002-9678-0007
Nabiha Nisar Sahito. Liaquat National Hospital and Medical College, Pakistan.
Email: nabihanisar19@gmail.com, https://orcid.org/0009-0009-0918-3775
Rabab Jahangir Khan. Liaquat National Hospital and Medical College, Pakistan.
Email: rababjahangir5.rj@gmail.com, https://orcid.org/0009-0005-5074-5136
Nareen Subhani. Liaquat National Hospital and Medical College, Pakistan.
Email: nareensubhani53@gmail.com, https://orcid.org/0009-0008-0641-8009
Ramaz Rashid. Liaquat National Hospital and Medical College, Pakistan.
Email: ramazrashid14@gmail.com, https://orcid.org/0000-0002-9036-9893
Nimra Akhtar. Liaquat National Hospital and Medical College, Pakistan.
Email: nimraakhtar84@gmail.com, https://orcid.org/0000-0003-1207-6814

Received: May 8, 2025.
Accepted: August 4, 2025.
Conflicts of interest: None.
DOI: https://doi.org/10.71164/socialmedicine.v19i2.2026.2157

Abstract

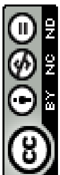
Background. This study assesses family communication patterns among undergraduate MBBS students at Liaquat National Medical College (LNMC), Karachi, Pakistan, and explores their impact on mental well-being and academic performance. Family communication patterns, comprising conversation and conformity orientations, play a critical role in interpersonal relationships and student development.**Methods.** A cross-sectional study was conducted from April 2022 to July 2024 with a sample of 365 students selected through non-probability convenience sampling; students present on data collection days were invited to participate. A self-administered questionnaire adapted from the Revised Family Communication Pattern (RFCP) instrument by Fitzpatrick and Koerner was used. The questionnaire was validated for the Pakistani population through a pilot study (Cronbach's alpha: 0.82 for conversation orientation and 0.79 for conformity orientation), confirming its reliability. Data were analyzed using SPSS version 22, employing *t*-tests and chi-square tests. Likert scale scores were interpreted using validated cutoffs (conversation orientation: ≥59 high, ≤58 low; conformity orientation: ≥21 high, ≤20 low). **Results.** Of the 400 students invited, 365 participated (response rate: 91.25%), while 35 absent students were excluded. Absent students did not differ significantly from participants in terms of gender, age, or semester ($p > 0.05$). Most participants (66%) exhibited low conversation orientation, and 94% showed high conformity orientation, indicating that protective family types were predominant (63%) (Table 1). Female students had higher conversation orientation scores ($p = 0.03$), whereas male students had higher conformity orientation scores ($p = 0.04$).**Conclusion.** The high prevalence of protective family communication patterns suggests a need for targeted interventions, such as psycho-educational programs and family therapy workshops, to foster open communication. These interventions may enhance students' emotional well-being, interpersonal skills, and resilience.

Keywords: Family Communication; Medical Students; Conversation Orientation; Conformity Orientation; Mental Well-being

Resmen

Antecedentes. Este estudio evalúa los patrones de comunicación familiar entre estudiantes de pregrado de medicina en la Facultad Nacional de Medicina Liaquat (FNML), Karachi, Pakistán, y explora las consecuencias en su bienestar mental y rendimiento académico. Los patrones de comunicación familiar, que abarcan conversación y ciertas tendencias en orientaciones, desempeñan un papel fundamental en las relaciones interpersonales y el desarrollo estudiantil. **Métodos.** Se realizó un estudio transversal de abril 2022 a julio 2024 con una muestra de 365 estudiantes seleccionados mediante muestreo por conveniencia no probabilístico; se invitó a participar a los estudiantes presentes en los días de recolección de datos. Se utilizó un cuestionario auto-administrado adaptado del instrumento Revised Family Communication Pattern (Patrón Comunicacional Familiar Revisado, PCFR) de Fitzpatrick y Koerner. El cuestionario fue validado para la población pakistaní mediante un estudio piloto (alfa de Cronbach 0.82 en proclividad a la conversación y 0.79 en proclividad a la conformidad), lo que confirma su fiabilidad. Los datos se analizaron utilizando SPSS versión 22, empleando pruebas t y pruebas de chi-cuadrada. Las puntuaciones en escala Likert se interpretaron utilizando puntos de corte validados (proclividad a la conversación: ≥59 alta, ≤58 baja; proclividad a la conformidad: ≥21 alta, ≤20 baja). **Resultados.** De los 400 estudiantes invitados, 365 participaron (tasa de respuesta: 91.25%), mientras que 35 estudiantes ausentes fueron excluidos. Los estudiantes ausentes no difirieron significativamente de los participantes en cuanto a género, edad o semestre ($p > 0.05$). La mayoría de los participantes (66%) mostró una baja proclividad a la conversación, y el 94% mostró una alta proclividad a llegar a acuerdos, lo que indica que predominaron los tipos de familia defensivas (63%) (Cuadro 1). Las mujeres obtuvieron puntuaciones más altas en su proclividad a la conversación ($p = 0.03$), mientras que los hombres obtuvieron puntuaciones más altas en su proclividad a la conformidad ($p = 0.04$). **Conclusión.** La alta prevalencia de patrones de comunicación familiar defensivos sugiere la necesidad de intervenciones específicas, como programas psicoeducativos y talleres de terapia familiar, para fomentar la comunicación abierta. Estas intervenciones pueden mejorar el bienestar emocional, las habilidades interpersonales y la resiliencia de los estudiantes.

Palabras clave: Comunicación familiar; Estudiantes de medicina; Orientación conversacional; Orientación a la conformidad; Bienestar menta l



Introduction

The family, the smallest social unit organized around marriage and blood kinship, serves as a fundamental institution that fosters child development and nurtures healthy future generations, thereby sustaining a resilient society [1]. Family communication focuses on two main factors: intersubjectivity (shared understanding within the family) and interactivity (how one person's actions or words affect others). It has two dimensions: conversation orientation, which encourages open discussions where everyone's ideas are valued, and conformity orientation, which emphasizes compliance with established rules or views set by parents. Based on these dimensions, families are categorized into four types: consensual (high in both conversation and conformity), pluralistic (high in conversation, low in conformity), protective (low in conversation, high in conformity), and laissez-faire (low in both) [2].

In today's world, many families are less congruent due to various factors, with poor communication between parents and children being a significant contributor [3]. Inadequate family communication following the loss of a parent is associated with negative psychological health outcomes in children and adolescents [3,4]. Positive family communication is linked to enhanced mental well being, whereas negative communication patterns can increase mental health issues, including depression, anxiety, and use of narcotics [5].

Communication effectiveness is essential to the quality of relationships between parents and children, particularly in families with children on the Autism Spectrum Disorder (ASD). Additionally, family communication patterns influence which behaviours are used to maintain relationships, thus impacting the overall quality of these relationships [6]. Positive family communication and feeling a sense of belonging at school may protect students against suicidal behaviors, even when adverse childhood experiences are present [7]. During the initial stages of personal and professional growth, individuals are particularly sensitive to the influence of their surrounding environment. As the first and most significant environment where people develop self-worth, self-drive, and interpersonal skills, the family is expected to play a crucial role in shaping abilities such as compassion, cooperation, and self-development, which support professional competencies [8]. The family environment is vital in shaping an individual's mental well-being, with an especially strong effect on the mental health of medical students. Family-related factors have a direct, extensive, and lasting effect on these students' psychological state. Examining family conflicts that impact mental health is essential for pinpointing significant issues and developing effective solutions. This can help in formulating strategies to enhance the mental well-being of medical students, thereby facilitating a healthier environment for their personal and professional development [9]. In hierarchical cultures like Indonesia, medical students often face inequitable communication with their elders and parents, which can impede the development of effective learning and communication skills [10].

Medical students are often observed as struggling with delivering bad news due to a limited ability to express sympathy or interpret the non-verbal cues [11]. Being raised in a withdrawn family negatively impacts the development of traits such as empathy, teamwork, and lifelong learning abilities in medical students, whereas a healthy relationship with parents, especially mothers, is associated with an enhancement of these traits [12]. Moreover, balanced communication patterns with parents, characterized by mutual respect and trust, support the development of effective interpersonal relationships and decision-making skills. In contrast, students from families in which one party dominates communication may exhibit issues such as jealousy and lack of empathy [13]. Adults who are raised in families with high conversation orientation report better relationship quality with their parents [14]. Family communication patterns strongly influence young adults' ability to adjust and adapt to their social environment, with conversation orientation positively influencing adjustment and conformity orientation negatively affecting it [15].

This study investigates family communication patterns among LNMC medical students, to inform interventions for improved mental health and academic performance.

Methodology

A cross-sectional study was conducted at Liaquat National Medical College, Karachi, Pakistan, from April 2022 to July 2024, targeting undergraduate MBBS students from the 1st to final year. Non-probability convenience sampling was used, inviting all students present on data collection days to participate, ensuring accessibility and feasibility within the study timeline. Exclusion criteria included absence on data collection days. Of 400 invited students, 35 were absent (8.75%), with no significant differences in gender (p=0.67), age (p=0.54), or semester (p=0.71) between participants and absentees, minimizing self-selection bias. The sample size was calculated as 362 for consensual and 348 for pluralistic patterns [16], and rounded to 365 to meet university requirements.

Data were collected using a self-administered questionnaire adapted from the Revised Family Communication Pattern (RFCP) instrument by Fitzpatrick and Koerner, comprising 26 items (15 for conversation orientation, 11 for conformity orientation). The questionnaire was validated for the Pakistani population via a pilot study with 50 students, yielding Cronbach's alpha of 0.82 (conversation) and 0.79 (conformity), indicating high reliability. Cutoff points (conversation: ≥59 high, ≤58 low; conformity: ≥21 high, ≤20 low) were adapted from a validated Indian study [17] and confirmed suitable for Pakistan through pilot testing. The Likert Scale ranged from 1 (strongly disagree) to 5 (strongly agree). Participants provided informed consent after briefing. Data were analyzed using SPSS Version 22, with T-tests for family type classification and chi-square tests for associations with demographic variables (p<0.05 significant). Ethical approval was obtained from LNMC's Research and Ethical Review Committee.

Results

Table 1 summarizes the sociodemographic profile and family communication patterns of the 365 participants. The population was predominantly female (63%), from nuclear families (69.9%), and single (98.1%). Over 56% were aged >20 years, with most families having 4-6 members (71%). Fathers were primarily businessmen (41.6%), while 78.8% of mothers were housewives (defined as unpaid domestic work), with working mothers' occupations including teaching [12%], healthcare [6%], and other professions [3.2%]. Protective families (63%) and consensual families (31%) were most common.

Table 1: Sociodemographic Profile and Family Communication Patterns (n=365)

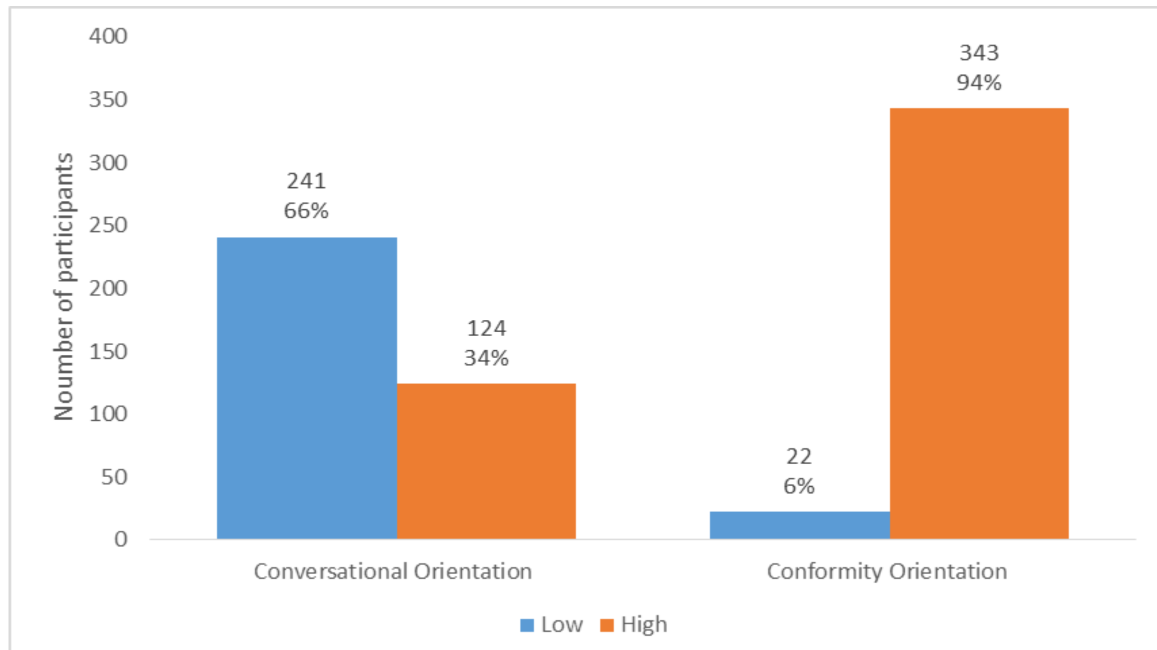
Variable		Frequency (%)
Gender	Male Female	135 (37) 230 (63)
Age	≤20 years >20 years	158 (43.3) 207 (56.7)
Family structure	Nuclear Joint	255 (69.9) 110 (30.1)
Family size	1-3 Members 4-6 Members 7-9 Members >9 Members	19 (5.2) 259 (71) 64 (17.5) 23 (6.3)
Father's Occupation	Private Job Businessman Government job Unemployed/retired	117 (33.3) 146 (41.6) 74 (21.1) 14 (4)
Mother's Occupation	House wife Teacher Doctor Others	279 (78.8) 42 (12) 21 (6) 12 (3.2)
Year of study	1st year 2nd year 3rd year 4th year Final year	74 (20.3) 82 (22.5) 73 (20) 72 (19.7) 64 (17.5)
Family type	Consensual Pluralistic Protective Laissez-Faire	113 (31) 11 (3) 230 (63) 11 (3)

Table 2: Sociodemographic Associations with Family Types

Variables	Consensual(n=113)	Pluralistic(n=11)	Protective (n=230)	Laissez-Faire (n=11)	p-value
Gender					
Male	32 (28.3%)	4 (36.4%)	95 (41.3%)	4 (36.4%)	0.02
Female	81 (71.7%)	7 (63.6%)	135 (58.7%)	7 (63.6%)	
Age group					
≤20 years	50 (44.2%)	5 (45.5%)	98 (42.6%)	5 (45.5%)	0.15
>20 years	63 (55.8%)	6 (54.5%)	132 (57.4%)	6 (54.5%)	
Family Size					
1-3 Members	8 (7.1%)	1 (9.1%)	9 (3.9%)	1 (9.1%)	0.01
4-6 Members	85 (75.2%)	8 (72.7%)	158 (68.7%)	8 (72.7%)	
7-9 Members	16 (14.2%)	2 (18.2%)	44 (19.1%)	2 (18.2%)	
>9 Members	4 (3.5%)	0 (0%)	19 (8.3%)	0 (0)	
Year of study					
1st year	24 (21.2%)	2 (18.2%)	46 (20%)	2 (18.2%)	
2nd year	26 (23%)	3 (27.3%)	50 (21.7%)	3 (27.3%)	
3rd year	22 (19.5%)	2 (18.2%)	47 (20.4%)	2 (18.2%)	0.09
4th year	21 (18.6%)	2 (18.2%)	47 (20.4%)	2 (18.2%)	
Final year	20 (17.7%)	2 (18.2%)	40 (17.4%)	2 (18.2%)	

Figure 1 illustrates the distribution of conversation and conformity orientations: 66% of participants had low conversation orientation (score ≤58), and 94% had high conformity orientation (score ≥21), reinforcing the prevalence of protective families.

Fig-1: Distribution of conversational and conformity orientation among participants



Discussion

The present cross-sectional study aims to investigate the quality of family communication patterns in undergraduate MBBS students and identify the correlation between different family communication patterns. The results were concluded using overall Conversational Orientation scores and Conformity Orientation scores among different genders, age groups, and study groups. Notably, a 2008 meta-analysis by Schrodt, Witt, and Messersmith demonstrated how these orientations are linked to information processing, behavioral, and psychosocial effects [18]. Our findings revealed higher Conversational Orientation scores in female students compared to male students, while Conformity Orientation scores were higher for male students. These findings underscore the potential impact on various aspects of personal and professional lives. The results indicated that most families exhibit low Conversational Orientation and high Conformity Orientation, emphasizing obedience to parental authority. Decision-making in such families is solely done by parents without explaining their reasoning to children, and family members are expected to follow certain norms and serve family interests [19].

Our research shows that families with higher conformity orientation are linked with less free-spoken and genuine communication, as well as with decreased equality among family members [18,19] . In contrast, families with lower conformity orientation are associated with higher levels of confidence [20]. Our results, depicting higher conformity orientation in larger family size, correlate with the results found by the study of Jenn Anderson. Increased number of siblings led to decreased conversation orientation and vice versa [20]. Another study correlated family communication patterns with behavioral health of students, showing higher levels of anxiety and depression in conformity oriented families, when compared to conversation oriented families [21]. Similar findings were observed in a different study by Hossein Kayedkhordeh, which presented lower self-esteem in students with conformity orientation families [21]. Families with a high conversation orientation engage in more frequent and recurring conversations, which fosters a secure understanding of how people around them communicate. In contrast, families with a high conformity orientation engage in less discussion and demonstrate a reduced ability to perceive how others communicate [22]. When a child becomes involved in behaviors that breach parental expectations, the pressure to conform may conflict with expectations for open conversation. As a result, the child may avoid conversations with their parents altogether [23].

A study by Xiaoyun Tao reports that the interpersonal relationships of college students are influenced by family parenting styles. Students raised in families that tend to be controlling and are characterized by overprotective and negative parenting styles exhibit higher interpersonal sensitivity than students from families that are more understanding and characterized by positive parenting styles [24]. Other studies indicate that positive parenting styles are associated with better quality learning engagement and intellectual development, while showing a negative association with learning motivation. In contrast, unfavorable parenting approaches are positively associated with learning motivation but negatively associated with positive mental states [25]. Another study suggests that individuals who experience healthier family communication and engage in approach coping tend to demonstrate stronger mental health when faced with hardships [26]. Other studies report that children feel more comfortable communicating with their parents when communication is productive and meaningful. Conversely, children may perceive communication with their parents as less important when interactions are infrequent and low in quality [27].

Conclusion

The study confirms that most LNMC medical students belong to protective families, characterized by high conformity and low conversation orientation. To address communication gaps, we propose implementing psycho-educational workshops for families that focus on active listening and open dialogue, as well as integrating communication skills training into the medical curriculum to bolster students' emotional well-being, interpersonal skills, and resilience.

Strengths: The study utilized a validated questionnaire, a large sample size (n=365), and rigorous statistical analysis, ensuring reliable findings.

Limitations: The cross-sectional design limits causal inferences, and convenience sampling may reduce generalizability. Although absentee bias was minimal, unmeasured factors (e.g., socioeconomic status) could influence results.

Recommendations Future research should adopt longitudinal designs and diverse samples, incorporating qualitative methods for deeper insight. Psychoeducational programs and family therapy workshops should be piloted to promote healthier communication patterns, with pre- and post-intervention assessments used to evaluate efficacy.

References

1. Hasanova, M.V. (2022). THE ROLE OF FAMILY IN DEVELOPMENT OF CHILD. Scientific Bulletin.
2. Fitzpatrick, M., Marshall, L., Leutwiler, T., & Krcmar, M. (1996). The Effect of Family Communication Environments on Children's Social Behavior During Middle Childhood. Communication Research, 23, 379 - 406.
3. Proceedings The Symposium of Literature, Culture, and Communication. Ramadhani P, Suciati S. Interpersonal communication patterns in long-distance relationship between students from outside Java and their parents in maintaining family harmony. 2023 Nov 22;3(1):680-0.
4. Weber, M., Alvariza, A., Kreicbergs, U., & Sveen, J. (2021). Family Communication and Psychological Health in Children and Adolescents Following a Parent's Death From Cancer. Omega, 83(3), 630–648.
5. Marth S, Cook N, Bain P, Lindert J. Family factors contribute to mental health conditions – a systematic review. Eur J Public Health. 2022;32(Suppl 3):ckac129.454. Published 2022 Oct 25. doi:10.1093/eurpub/ckac129.454
6. Fairuza Arindra, Maulina Pia Wulandari, Antoni A. The link between communication competence and family communication patterns. 2023 Mar 30;7(1):085-104.
7. Lensch T, Clements-Nolle K, Oman RF, Evans WP, Lu M, Yang W. Adverse Childhood Experiences and Suicidal Behaviors Among Youth: The Buffering Influence of Family Communication and School Connectedness. J Adolesc Health. 2021;68(5):945-952. doi:10.1016/j.jadohealth.2020.08.024
8. Berduzco-Torres N, Medina P, Choquenaira-Callañaupa B, San-Martín M, Delgado Bolton RC, Vivanco L. Family Loneliness: Its Effects in the Development of Empathy, Teamwork and Lifelong Learning Abilities in Medical Students. Front Psychol. 2020;11:2046. Published 2020 Aug 18. doi:10.3389/fpsyg.2020.02046
9. Tao X. The Influence of Family Factors on The Mental Health of Medical Students and Suggestions. International Journal of Education and Humanities. 2022 Nov 23;6(1):12–5.
10. Claramita, M., Prabandari, Y., Graber, A., & Scherpbier, A. (2020). Challenges of Communication Skills Transfer of Medical Students in the Cultural Context of Indonesia. Interdisciplinary Journal of Problem-based Learning, 14.
11. Pun J. A study of Chinese medical students' communication pattern in delivering bad news: an ethnographic discourse analysis approach. BMC Medical Education. 2021 May 19;21(1):286.
12. Berduzco-Torres N, Medina P, Choquenaira-Callañaupa B, San-Martín M, Delgado Bolton RC, Vivanco L. Family loneliness: its effects in the development of empathy, teamwork and lifelong learning abilities in medical students. Frontiers in Psychology. 2020 Aug 18;11:2046.
13. Ramadhani, P., & Suciati, S. (2023). Interpersonal communication patterns in long distance relationship between students from outside Java and their parents in maintaining family harmony. Symposium of Literature, Culture, and Communication (SYLECTION) 2022. https://doi.org/10.12928/sylection.v3i1.14065.
14. Szkody E, McKinney C. Family communication patterns and relationship quality between emerging adults and their parents. Journal of Social and Personal Relationships. 2021 Nov;38(11):3177-97.
15. Zareian Jahromi A, Mahmoudian M, Samani S. Adolescent adjustment: investigating the predictive role of family communication patterns. International Journal of School Health. 2020 Oct 1;7(4):20-4.
16. Dean AG, Sullivan KM, Soe MM. OpenEpi: Open Source Epidemiologic Statistics for
17. Public Health, Version. www.OpenEpi.com, updated 2013/04/06, accessed 2022/06/18
18. Savita Gupta G. Family communication patterns questionnaire: Development and validation. International Journal of Recent Technology and Engineering (IJRTE). 2019;8:542-50.
19. Schrodt P, Witt PL, Messersmith AS. A meta-analytical review of family communication patterns and their associations with information processing,

behavioral, and psychosocial outcomes. Communication monographs. 2008 Sep 1;75(3):248-69.
20. Koerner AF, Schrodt P. An introduction to the special issue on family communication patterns theory. Journal of family communication. 2014 Jan 2;14(1):1-5.
21. Anderson J, Dirks L, Graesser N, Block P. Family Size Decreases Conversation Orientation and Increases Conformity Orientation. Discourse: The Journal of the SCASD. 2018;4(1):2.
22. Kayedkhordeh H, Parsamanesh M, Boroomandnasab M. Investigating the Relationship between Family Communication Patterns and Life Satisfaction According to the Mediating Role of Self-Esteem in Students. Stud. 2014;4(1):01-5.
23. Thomas SN, Hovick SR. The indirect effect of family communication patterns on young adults' health self-disclosure: Understanding the role of descriptive and injunctive norms in a test of the integrative model of behavioral prediction. Communication Reports. 2021 Sep 2;34(3):121-36.
24. Hays A, Maliski R, Warner B. Analyzing the effects of family communication patterns on the decision to disclose a health issue to a parent: The benefits of conversation and dangers of conformity. Health Communication. 2017 Jul 3;32(7):837-44.
25. Tao X. The Influence of Family Factors on The Mental Health of Medical Students and Suggestions. International Journal of Education and Humanities. 2023;6(1):12-5.
26. Xing Z. Explore How Family Factors Affect Students' Academic Performance-Based on Literature Analysis. Journal of Education, Humanities and Social Sciences. 2023 Apr 5;10:91-8.
27. Geçer E, Yıldırım M. Family communication and psychological distress in the era of COVID-19 pandemic: Mediating role of coping. Journal of Family Issues. 2023 Jan;44(1):203-19.
28. Ramadhani, P., & Suciati, S. (2023). Interpersonal communication patterns in long distance relationship between students from outside Java and their parents in maintaining family harmony. Symposium of Literature, Culture, and Communication (SYLECTION) 2022. https://doi.org/10.12928/sylection.v3i1.14065.

Social Medicine
Health For All
ISSN: 1557-7112