

Mental health for both staff and students

AU Counselling Centre

- Air University is aware of how crucial mental health is to creating a welcoming and encouraging learning environment for its students. The university has a special Counselling Centre for Mental Health to safeguard the wellbeing of its student body.
- The counselling centre provides students and staff with a secure, private setting where they can talk to qualified, sympathetic counsellors about their emotional difficulties, pressures, and fears. Students and staff can seek advice and help at the Counselling Centre if they are struggling with academic stress, personal challenges, or adjustment issues.
- The trained counsellors at Air University are prepared to deal with a variety of mental health issues and offer individualised counselling sessions that are catered to the requirements of each student and staff. They provide coping mechanisms, stress reduction methods, and emotional support to equip kids with the tools they need to face problems successfully.
- The Counselling Centre offers group and individual counselling as well as awareness-raising courses, seminars, and programmes. Through these programmes, the student and staff body will be encouraged to cultivate a culture of emotional wellness and resilience.
- Air University prioritises mental health care to give its students the tools they need to succeed academically and personally. The counselling centre is essential to fostering a supportive campus environment where students and staff can develop and achieve success in all facets of their lives.

Air University Mental Awareness

Along with the Blood Donor Society, Air University Pakistan organized a mental health awareness event. The purpose of the event was to encourage mental health and increase understanding of the value of mental health in our community. Participants learned crucial information about maintaining excellent mental health and comprehending common mental health issues through interactive sessions, workshops, and educational speeches.

AIR UNIVERSITY

AIR UNIVERSITY BLOOD DONOR SOCIETY

SEMINAR
IMPORTANCE OF
Mental Health

Take care of your mental health for a better life

Department of Student Affairs
AIR University Islamabad

SPEAKER

Khadija Tanveer
Clinical Psychologist

Wednesday February 22, 2023 10:30 AM AU Arena

in @ aubdsofficial

PAKISTAN YOUTH CLUB
Collaborator

Mental Health and Education

Antomy department from our Medical College:

The syllabus for our department of anatomy has been altered to place more emphasis on the topic of mental health and raising people's awareness of it.. The curriculum of neuroscience module is related to the mental and psychological health of individuals . Students are taught anatomical basis of mental and psychological illnesses in this module.

Humanities Education Psychology

Our HEP department gives counselling and mental health issues top priority in order to alleviate obstacles, depression, and anxiety faced by individuals inside the university. Even though our psychology department is working hard to encourage the majority of the students, staff, and faculty to learn about the courses and enrol themselves in short courses so that they are sufficiently capable of handling real-world situations. We are offering the following program;

- MS Clinical Phycology program.

The Mental Health Awareness Seminar

Organized by the Air University Blood Donor Society on 22 February 2023, at AU Arena in collaboration with Pakistan Youth Club.

The seminar featured two guest speakers, including a clinical psychologist, Ms. Khadija Tanvir, who discussed various aspects of mental health issues faced by the youth, stress management techniques, anxiety management, and daily life coping strategies for dealing with anxiety and depression.

The event was a huge success with a turnout of over 200 attendees, providing valuable insights and practical tips to attendees. The seminar was able to raise awareness about mental health issues and promote the importance of prioritizing mental well-being.





World Mental Health Day

World Mental Health Day is marked every year on October 10th to raise awareness about mental health around the world and to mobilize efforts in support of mental health. The World Federation for Mental Health (WFMH) announced the theme for World Mental Health 2023, which is "Make Mental Health for all a Global Priority". On account of the same, Air University organized a Session on Monday, 10 th October, 2023

Topic: Mental Health & Wellbeing: Is it all in the Air?
Guest Speaker: Dr. Mowadat Hussain Rana, MBBS, MCPS, FCPS, DCPS-HPE, MCPS-HPE, D-CBT (Oxford), MRCPsych (UK), FRCPsych (UK), Professor of Psychiatry and Behavior Sciences.

Promoting Health & Wellbeing through Local Initiatives

We at Air University believe in the potential of community participation and the beneficial influence it may have on people's health and well-being. With a strong desire to improve the lives of those around us, we have launched a series of projects in conjunction with local communities. These projects, which are sponsored by student volunteer programmes, aim to improve and promote many areas of health and wellness, including hygiene and nutrition, family planning, sports, exercise, healthy ageing, and other related themes.

'IMPORTANCE OF COUNSELLING RELATED TO ANXIETY AND STRESS IN MAJOR ELECTIVE SURGICAL PATIENTS'



'IMPORTANCE OF COUNSELLING RELATED TO ANXIETY AND STRESS IN MAJOR ELECTIVE SURGICAL PATIENTS' An interventional study'

Maryam Ijaz, Malaika Manzoor, Fatima Shahid, Ifra Jamil Supervisor: Dr Juwayria Omar
Fazaia Medical College, PAF Hospital Islamabad



Introduction and background

The preoperative and post-operative anxiety has proved to affect the recovery of the patients.[9] Different methods have been used in past to relieve anxiety levels in surgical patients including counselling, using clown doctors[8], also preoperative guided imagery[10]. Focusing postoperative pain, behavioral recovery, duration of stay and psychological preparations have been proved to be beneficial.[11] Having an estimate about the anxiety levels, the paramedic staff adopt appropriate measures to reduce anxiety and those proved to be successful in surgical patients.



Counselling

OBJECTIVES



1. To assess the factors of anxiety/stress in pre-operative surgical patients related to their procedure

2. To analyse concerns of patients about changes in their daily life related to surgery.

3. To determine the importance of counselling/simple conversation in reducing stress/anxiety, by knowing its root cause in surgical patients.

METHODOLOGY

Surgical Fear Questionnaire (SFQ)

Hamilton Anxiety Rating Scale (HAM-A)

Sampling technique was done through purposive sampling and recruited elective surgical patients from out patient department, simple random sampling by toss method was done to divide into two equal halves.

The anxiety score of patients were collected post operatively according to the standardized questionnaires. Only the interventional group patients were counselled pre operatively to see if it affects the anxiety score.

The anxiety scores of the two questionnaires were compared to analyze the affect of guidance and discussion session. Data analysis was done on SPSS 23. Chi square and independent t tests were applied to get results.

Recommendations

- Counselling should be done by a professional counselor, trained nurses, paramedics or volunteer medical students.
- Introduction of brochures, videos and images related to surgery can be useful for such purposes.
- Preoperative education of patient on potential intraoperative experience can be done.

Limitations

- Difference in interpretation of scores as counselling was done by different members.
- Time Limitation
- Study was conducted in a semi government hospital, thus majority of the patients had benefits of insured medical facilities by government.



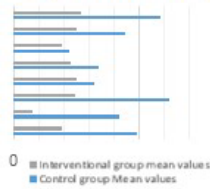
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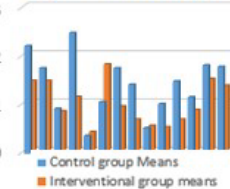
RESULTS

VARIABLE	CONTROL GROUP		INTERVENTIONAL GROUP		P-values
	MEAN	S.D	MEAN	S.D	
Anxious mood	2.23	1.455	1.43	0.858	0.012
Insomnia	2.50	1.408	1.10	1.062	0.000
Depressed mood	1.07	1.311	1.77	0.935	0.021
Somatic sensory symptoms	1.43	1.357	0.63	0.669	0.005
Respiratory	1.03	1.377	0.47	0.629	0.045
Gastrointestinal	1.50	1.358	0.63	0.850	0.004
Somatic muscular symptoms	1.77	1.431	0.90	0.960	0.008

SFQ scores Graph



HAM-A scores Graph



Discussion:

- The study we conducted showed that the counselling/guidance session was affective in reducing stress/anxiety levels, similarly, a study in Black Sea region showed that the operation room nurse visits to patients before surgery contributed to decreased preoperative stress levels.
- The results interpretation in this study showed significant decrease in anxiety/stress levels, so a similar South-Asian region study in India with the same sample size as ours showed that the post-operative surgical patients treated along with the counselling intervention along with the medical treatment were found to be less subjected to anxiety, depression and post traumatic stress disorder.





فضائیہ میڈیکل کالج کی جانب سے صاف پانی اگاہی مہم



پانی صاف کرنے کے گھریلو طریقے



پانی کو اُبالنا



پھٹکری / کلورین
کا استعمال



پانی کو چھاننا



ٹینکی کو صاف
رکھنا



فلٹر کا استعمال





1. Campaigns for Hygiene Education and Awareness

Our students lead hygiene education and awareness programmes in collaboration with local schools and community centres. These programmes emphasise good handwashing techniques, personal hygiene practises, and sanitation strategies.. We empower individuals to maintain clean and healthy living environments, thereby lowering the risk of disease transmission.

An interventional Study to determine the quality of water and frequency of water-borne diseases in suburban and slum areas of ICT



A cross sectional study to determine the quality of water and frequency of water borne disease in suburban and slum areas of ICT

Submitted by: Haseeb-ur-Rahman, Tayyab Taimoor, Amama Afaq, Tooba Nayyar, Amina Munir, Manahil Gul

Supervisors: Dr. Juwerya Omer

Department of Community Medicine, FMC



Introduction

- Due to alarming increase in population and rapid industrialization, drinking water quality is being deteriorated day by day in Pakistan.
- About 20% of the whole population of Pakistan has access to safe drinking water. The remaining 80% of population is forced to use unsafe drinking water due to the scarcity of safe and healthy drinking water sources.
- There is immediate need to take protective measures and treatment technologies to overcome unhygienic condition of drinking water supplies in different areas of Pakistan

Rationale

In suburbs of Islamabad, ICT water supply is not available. People of communities are forced to get water from different sources like wells, tankers etc. in which quality of water is compromised leading to risk of diarrheal diseases. Focus of our study is to create awareness among communities about importance of water purification and safe water in reducing diarrheal diseases for better health in all age groups. AI based algorithm would be used to predict the future diseases which will not only help the local communities but also government to allocate resources and install water purification plants in these suburban areas.

Results

- Results regarding the quality of water from the National Institute of Health Nutrition Division showed that fecal Coliform present in 100% of samples, E.coli in 25% especially coming from tap water, spring water, wells, and all those who were using supply water of CDA. Boring water showed 2% E. coli.
- Frequency of diarrhea in low income respondents (5k-10k) is 80% and with income 11k-15k it is 20%.
- Frequency of diarrhea in respondents using electric pump is 72.9% whereas in CDA water it is 2.9%.
- Frequency of diarrhea who never use any purification method is 71.4%
- Those using chlorine(2,8) boiling water(17) and filter for water purification() had the lowest frequency of diarrhea.



Cross tabulation between Gender and Stage of Diarrhea

Gender	Prevalence of diarrhea	P value
Female	44.3%	.004
Male	5.7%	

In males, frequency of diarrhea is 5.7% whereas in females it is 44.3% p value is less than 0.05 hence it is significant.

Cross tabulation between gender and experience of nausea and vomiting

Gender	Frequency of occasional symptoms	P value
Female	44.9%	.011
Male	5.7%	

Cross tabulation between purification method and frequency of diarrhea

Purification Method	Prevalence of diarrhea	P value
Chlorine	2.8%	.006
Boiling	17%	
Filter	0%	
None	71.4%	

The frequency of diarrhea is lowest in those who use chlorine and boiling water. The frequency of diarrhea is highest in those who do not use any purification method.

Aim:

To highlight the importance of water purification for better health of community.

Objectives:

1. To determine the frequency of most common waterborne diseases in suburbs of Islamabad which include Shah Alahditta and Mehrabadi in the past three months.
2. To create awareness among the communities about hazards of waterborne diseases and water purification.
3. To check quality of water in slum areas.

METHODOLOGY

Inclusion Criteria:

- All available people who gave consent to be a part of the study.

Exclusion Criteria:

- Immunocompromised patients suffering from major health issues like HIV Hepatitis and cancer under the influence of life saving drugs and people having any other medication due to some ongoing diseases.

Sample Size:

- Keeping confidence level at 95%, confidence interval at 10% and prevalence of diarrheal diseases 50%, sample was calculated to be 96.

Study Design:

- Cross sectional

Study Duration:

- February - September (2023)

Study Setting:

- FMC Islamabad, Shah Alahditta, Mehrabadi in collaboration with NIH and NUST

Sampling Techniques:

- Random Sampling

Study Tools:

Questionnaire: Based on questionnaire in Urdu administered by the investigators themselves. Data obtained was both qualitative and quantitative.

Questionnaire has following parts:

- Demographic profile and socioeconomic status
- Water supply in the household
- Sanitation practices at the household
- Frequency of getting waterborne diseases
- Effect of awareness and counseling
- Written and informed consent from individuals



Water samples were collected by students of Fazaia Medical College, from door to door in autoclaved polythene-sealed bottles under the supervision of Nutrition Division NIH. This process was assisted by Lady health workers of the area and community health center of Shah Alahditta. For awareness, the community was gathered in the Community Health Center with the help of LHWs. Then a lecture regarding diarrheal diseases and the harms of unsafe drinking water along with ways of water purification was delivered by the students of FMC. Then brochures were distributed among the community people for further reminder. Later Posters were pasted in different mohallas during the water sample collection.

DISCUSSION

- The study conducted in 2012 published by Iranian journal of public health shows population below the poverty line earning RS 50 to 100 per day were having more prevalence of diarrhea with p value (<.05) . In our study, the trend of diarrhea was 60% more in people with low income than with relatively high income.
- According to research held in Nigeria in 2016 the percentage of diarrhea was more in respondents having primary education (51%) while our study also shows similar trend with 40 % diarrhea in respondents having primary education.
- A study conducted in 2003 on chlorination and safe storage of drinking water shows chlorination of household water significantly reduce waterborne diseases (p-value<0.05). Our study also shows respondents using chlorine as purification method have less diarrhea (p-value<0.05)

Conclusion

Tap water, supply water, spring water, and well water were loaded with fecal Coliform and E. coli. Water was highly unfit for human consumption. Any type of purification method reduced diarrhea. Males, labourers, households with income less than 10k, usage of plastic storage containers and households not using any water purification methods had the highest frequency of waterborne diseases. Children under 5 and adults above 35 were highly susceptible to diarrheal

Way Forward

These results will be shared with policy makers through NIH nutrition division and ministry of health for provision of resources for water purification and control of diarrheal diseases through awareness campaigns using various ways of communication.

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3. Daud, M., Nafees, M., Ali, S., Riwani, M., Bajwa, R. A., Shakoar, M. B. . . . Murad, W. (2017). Drinking water quality status and contamination in Pakistan. *BioMed research international*, 2017.
4. WHO. (2023). Proportion of households with access to a source of safe drinking water.

Workshops on Nutrition and Community Gardens

We recognise the significance of appropriate diet in overall health. Our students host nutrition workshops and work with local communities to establish community gardens. These initiatives not only educate community members about balanced diets and healthy eating habits but also provide access to fresh, organic produce. We contribute to the general health of the community by advocating healthier dietary choices.

3. Clinics for Family Planning and Counselling

We establish clinics that provide vital services and counselling to support family planning and reproductive health. Contraception, reproductive health examinations, and counselling sessions are available at these clinics. We contribute to planned and healthier family life by ensuring that families have the resources and information they require.

EFFECTIVENESS OF DIGITAL INTERVENTION FOR BETTER MATERNAL HEALTH



Effectiveness of Digital Intervention for Better Maternal Health



Submitted by: Haida Aghar, Haqia Ashar, Arsan Khan, Kinza Haroon, Ayesha Zaheer, Awwis Shebri

Supervisor: Dr. Juwayria Omar

Department of Community Medicine, FMC

Introduction

It is commonly known that antenatal care is important for a healthy maternity. The existing primary health structure in Pakistan provides a good groundwork to deliver care services; [5] however, utilization for reproductive and maternity care remains substandard for women who live in geographically remote regions of Pakistan. With the advent of the information age, the use of smartphones and apps is becoming more common and so Antenatal care apps can help women in the impoverished regions access health care which would otherwise be unavailable to them. Making and providing the women with an app that is free of cost would help bridge the gap in the current healthcare infrastructure. [1]

- 15% of these women face obstetrical and medical complications, (that's around 700,000 women per year)
- MMR in Pakistan is 276 per 100 000 births annually.

Rationale

Women in remote areas are least likely to receive or seek adequate Antenatal Care due to poverty, distance, inadequate basic health services, lack of information, conservative social and family norms, and religious beliefs. To overcome these barriers, basic health education was provided by using cost-effective and easily accessible technology (app and YouTube channel) to improve maternal health and quality of services in these far flung areas. [1]

RESULTS:

Sociodemographic Data:

Age of the Participants:

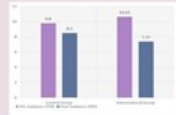


EPDS Scores and Other Variables:



ANALYSIS:

Comparing Mean Post-Guidance EPDS Scores of Control and Interventional Groups



Applying Paired Sample T-Test:

When independent t test was applied p value was 0.021 which shows that additional guidance and knowledge about different aspects of antenatal care reduces anxiety and depression in pregnant females.

Aim:

To highlight the importance of antenatal care counseling and guidance on maternal health.

Objective:

- To provide cost-effective and easily accessible consultation and information through a mobile app to especially underprivileged females.
- To provide health education about various components of antenatal care (nutrition, visits, immunization, exercise yoga etc) for better maternal and child health.
- To guide mothers regarding risk factors that can affect their mental /physical health, through technology (app, YouTube channel).
- To determine the frequency of antenatal depression in pregnant females booked in PAF Hospital, Unit 1, Islamabad.

Methodology

Study Design: Quasi-experimental Study (Interventional Study)
Pilot study: Before research, a pilot study was conducted on 20 participants

Study Population: Pregnant females, age 20-35 years, of all trimesters, residents of PAF Class 4 colony, Islamabad (low-middle socioeconomic status), booked in PAF Hospital Unit 1, Islamabad for antenatal visits

Study Duration: 9 Months (January to September)

Sample Size: A Sample size of 60 was calculated using a sample size calculator for the survey systems with a confidence level of 95% and confidence interval of 10 %, a population of 2.6 million, and percentage of pregnant females 6%

Study Setting:
• PAF Class 4 Colony, Islamabad
• PAF Hospital Unit 1, Islamabad
• Fazaia Medical College, D-9, Islamabad

Sampling Technique: Purposive sampling

Inclusion Criteria:
Pregnant females of age 20-35 years of all trimesters of pregnancy belonging to low/middle socioeconomic class, have a smartphone and can independently use the app; provided informed consent and voluntary participation in this study.

Exclusion Criteria:
• Those with language barrier
• EPDS < 4 (These participants will be referred to a psychiatrist)
• Diagnosed case of depression,
• History of any other mental health disorder due to which they are unable to comprehend the specification of study.
• Family history of depression;
• Participation in other psychological intervention programs or psychotherapy

Study Tools:
• EPDS
• Self-Structured Questionnaire
• APP (Mums App)

Quasi-experimental study (interventional study) was conducted from January to September 2023 at Fazaia Medical College, Islamabad. Pregnant females in all trimesters of pregnancy were included, and 60 respondents were included using a purposive sampling technique from PAF unit 1, belonging to class 4, after their consent. Participants were divided into equal groups by simple random sampling (toss method). Half of the participants were given App (Mums APP) and the other half were guided traditionally. Both groups were administered the Edinburgh Postnatal Depression Scale (EPDS) and a self-structured questionnaire. After 6 weeks the EPDS was administered again and scores were recorded. Data was analyzed by SPSS 23. Descriptive and inferential analysis was done by calculating percentages, frequencies, cross-tabulation, and Chi-square test. Independent sample t-test was used to compare the effect of intervention in both groups. Data was presented in tables and charts.



DISCUSSION:

The study found that the EPDS scores tend to increase as the pregnancy progresses. There was also a correlation between family income and EPDS scores those with higher family income showed less score, this result is also consistent with other international researches. The study found a trend between education level and eads scores, the higher the education the more the scores, this finding is consistent with a study done in India. [2] There was also a correlation between family income and EPDS scores those with higher family income showed less score, this result is also consistent with other international researches. Analysis showed a significant correlation between number of children and EPDS scores. Women with 3 or more children had the highest scores. Study also suggested that women who had frequent antenatal visits had less stress as compared to those who had few visits

CONCLUSION:

The APP was found to be effective in reducing EPDS Scores during antenatal period in all trimesters and can be used as a tool to provide better antenatal care in impoverished and hard-to-reach areas.

LIMITATIONS AND RECOMMENDATIONS:

Time constraint was a major limitation of this study as most of the time was consumed in App development. The sample size was small. Due to scarcity of time and resources this study only focused to see the effectiveness of technology based health education on Anxiety and Depression through EPDS scale. Other parameters of maternal health were not studied and recorded. We will continue this study and more participants will be added, consequently increasing the sample size. We will eventually expand the study to see the effect of technology on overall health and improved quality of life and other parameters of female health. App will be provided to the females living in far-flung areas of Pakistan who don't have an access to basic health facilities due to religious, social and cultural norms, and it will provide free of cost, easily accessible knowledge and guidance to the underprivileged. App will be improved to include more videos regarding, preconception female health care, postnatal care of the mother and child, general care of the mother and neonate. App will be technically improved in various aspects such as alerts about antenatal appointments

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4. Sports and Fitness Programmes

Physical activity is important for both physical and mental health. In partnership with local schools and recreation centres, we organise sports and exercise programmes. These programmes promote physical activity on a daily basis, building a sense of community, teamwork, and overall fitness. From sports tournaments to fitness workshops, these projects encourage community members of all ages to live an active lifestyle.

The Air University Sports Complex, Gym, and Day Care Center demonstrate the institution's commitment to fostering wellness and providing comprehensive support to its community. These facilities promote physical fitness, offer recreational opportunities, and create a nurturing environment for families. By prioritizing the holistic well-being of students, faculty, staff, and their families, Air University recognizes that a healthy and balanced lifestyle is fundamental to personal growth and success. These facilities not only contribute to the physical health of the community but also foster a sense of camaraderie, inclusivity, and support, ultimately enriching the overall university experience.