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2. الشيخ، سليمان الخضري (1982). دراسة في التفكير الخلفي لدى المراهقين والراشدين، الكتاب السنوي في علم النفس.

3. الخطيب، جمال الحديدي، منى السرطاوي، عبد العزيز (1992). إرشاد أسر الأطفال ذوي الحاجات الخاصة. دار حنين، عمان، الأردن.

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تعزية

الدكتور / فتحي لوزا في رحاب الله

انتقل إلي رحمة الله الدكتور/ فتحي لوزا - إستشاري الطب النفسي والمدير العام لمستشفى بهمان بالقاهرة مصر في 28 يونية 2006.

ولد - رحمه الله - في محافظة أسيوط في جنوب مصر في 27 يوليو (تموز) 1929، وقد كان أبوه محاميا بارزا. نشأ في بيئة ريفية ودرس المرحلة الابتدائية بمدينة منفلوط ثم إنتقل إلي كلية فيكتوريا (النصر) ذات الشهرة مع كثير من أبناء النخبة الذين يجيدون التواصل والتعامل مع مختلف الفئات مما كان له أطيّب الأثر في حياته العملية.

وقد تخرج في كلية طب عين شمس عام 1954 وإنضم إلي مستشفى بهمان في 1955 وحصل علي عضوية كلية الأطباء النفسيين البريطانية في 1971 ثم الزمالة بها في 1972 والـبورد الأمريكي في الطب النفسي في 1984. وكان طبيباً نفسياً بارزاً في مصر علي مدي خمسين عاما حيث قاد أقدم وأكبر مستشفى نفسي خاص في الشرق الأوسط خلال الكثير من الجدل السياسي والأكاديمي بما في ذلك عدة حروب وحكومات إلي أن خرجت مستشفى بهمان الحديثة بشكلها الحالي رغم كل الظروف.

وقد كان رحمه الله بطلا رياضياً في الملاكمة ورياضات الماء وكانت له سمات قيادية مع إتجاهات حانية نحو الآخرين في نفس الوقت مما زاد في حب مرضاه والعاملين معه علي حد سواء وكان يعلم جيداً متي يقدم ومتي يتريث وزاد ذلك في حنكته الإجتماعية والإدارية مع جميع المستويات التي تعامل معها من البسطاء إلي النخبة. لقد شعر الآخرون بقربه منهم أو حتي قرابته إليهم أكثر ممن سبق أن تعاملوا معهم في مجال المهنة أو خارجه.

وقد عرف عنه إخلاصه للعمل وحرصه علي صالح العمل في كل الأوقات مما سهل قيادة مايقرب من ثلاثمائة من العاملين ومائتين من المرضى بالمستشفى ورفع مستوي العمل والرعاية بالمستشفى لهم جميعاً فخرج من المستشفى - علي سبيل المثال - العديد من الأطباء المصريين الذين لم يجدوا صعوبة في الحصول علي أعلى الشهادات في الطب النفسي منذ الثمانينات من القرن الماضي.

وقد ترك دكتور فتحي زوجه هي السيدة فرانسيس وابنه هي الدكتورة شهيرة وإبنين هما الدكتور ناصر، الأستاذ خالد، كما ترك أربعة أحفاد يتوقون إلي أن يصبحوا أطباء مثله وأن يكملوا مسيرته. ولكن الدكتور فتحي لوزا ترك عدد أكبر بكثير من المحبين والمخلصين الذين يذكرونه بالخير علي الدوام.

محمد فخر الإسلام

إستاذ الطب النفسي

مستشار أكاديمي بمستشفى بهمان

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21. Whitman SM, Jacobs EG: Responsibilities of the Psychotherapy Supervisor. *American Journal of Psychotherapy* 1998; 52(2):166-175.
22. Spitz HI: Group Psychotherapy of Substance Abuse in the Era of Managed Mental Health Care. *International Journal of Group Psychotherapy*, 2001; 51(1): 21-41.
23. Yalom ID: The Theory and Practice of Group Psychotherapy, Fourth Edition. New York, Basic Books, 1995.

المخلص :

إن تدريب الأطباء في مجال الطب النفسي يمر بمرحلة تحول كبيرة في الدول الصناعية كالولايات المتحدة ، كندا إنجلترا وألمانيا ، وكتعبير عن هذا التغيير فإن مجلس التعليم الطبي العالي في الولايات المتحدة قد تبني مؤخراً مبدأ تعليم كافة أشكال العلاج النفسي في برامج تدريب الطب النفسي، كما أنه على موازاة ذلك فإن تأثير الطب القائم على الدلائل أدى للبحث عن وسائل العلاج ذات الجدوى بالكلفة . وفي هذا السياق فقد قام قسم الطب النفسي والعلوم السلوكية في كلية طب تكساس في هيوستن بتنظيم برنامج للعلاج الجماعي منذ بداية التسعينات . وهذا يتيح تدريب المقيمين في الطب النفسي في مجال العلاج النفسي في إطار مستوى جيد من الرعاية النفسية التي تأخذ التكلفة بعين الاعتبار ، وسوف نتناول الخبرات المكتسبة في هذا البرنامج خلال العشر سنوات الماضية ، وذلك حتى تستفيد برامج التدريب الأخرى من هذه الخبرة .

*Correspondence:

Pedro Ruiz, M.D.

1300 Moursund Street

Houston, Texas 77030

Phone: 713-500-2799

Fax: 713-500-2757

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6. Gabbard GO, Kay J: The Fate of Integrated Treatment: What-
ever Happened To the Biopsy-
chosocial Psychiatrist? *Ameri-
can Journal of Psychiatry*, 2001;
158(12):1956-1963.
7. Kandel A, Langrod J, Ruiz P:
Changes in Future Time Percep-
tion of Day Hospital Psychiatric
Patients in Response to Small
Group Treatment Approaches.
Journal of Clinical Psychology,
1981; 37(4):769-775
8. Khan SR, Cowan KA, Ruiz P:
The Role of Group Psychother-
apy in Psychiatric Residency
Training. *The Jefferson Journal
of Psychiatry*, 1996; 13(1):27-
34.
9. Herz MI, Lamberti JS, Mintz J,
Scott R, O'Dell S, McCartan L,
Nix G: A Program for Relapse
Prevention in Schizophrenia: A
Controlled Study. *Archives of
General Psychiatry*, 2000;
57:277-283.
10. Ruiz P: On the Perception of
the "Mother-Group" in T-
Groups. *International Journal
of Group Psychotherapy*, 1972;
XXII (4):488-491.
11. Scheidlinger S: An Overview of
Nine Decades of Group Psycho-
therapy. *Hospital and Commu-
nity Psychiatry*, 1994; 45(3):
217-225.
12. Schreter RK: Reorganizing
Departments of Psychiatry,
Hospitals, and Medical Centers
for the 21st Century. *Psychiatric
Services*, 1998; 49(11):1429-
1433.
13. Pardes H: The Future of Medi-
cal Schools and Teaching Hos-
pitals in the Era of Managed
Care. *Academic Medicine*,
1997; 72(2):97-102.
14. Pardes H: The Perilous State of
Academic Medicine. *Journal of
the American Medical Associa-
tion*, 2000; 283(18):2427-2429.
15. Averill PM, Ruiz P, Small DR,
Guyann RW, Tcheremissine O:
Outcome Assessment of the
Medicaid Managed Care Pro-
gram in Harris County (Hous-
ton). *Psychiatric Quarterly*,
2003; 74(2):103-114.
16. Bienenfeld D, Klykylo W,
Knapp V: Process and Product:
Development of Competency-
Based Measures for Psychiatry
Residency. *Academic Psychia-
try*, 2000; 24(2):68-76.
17. AADPRT Task Force in the
Quality of Residency Programs:
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Residency: The Assessment of
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tributing Psychiatric Residents
in the Service of Health Care
Reform. *Academic Psychiatry*,
1999; 23(2):61-70.
18. Dagg PK, Evans JB: The Syn-
ergy of Group and Individual
Psychotherapy Training.
*American Journal of Psycho-
therapy*, 1997; 51(2):204-209.
19. Markus HE, Abernethy AD:
Joining With Resistance: Ad-

7. Establish early on the standards of confidentiality in group therapy programs, as well as the respect for the doctor-patient relationship in those settings.

Conclusion

Given the recent changes and challenges that have and still are taking place in the current health and mental health care systems of the United States, group therapy can be an ideal setting for an efficient and a cost-effective approach to psychiatric care; particularly, with respect to the full utilization of the biopsychosocial model of psychiatric care. Additionally, it can also be an ideal setting for the learning of all psychotherapy modalities. Without question, the diversity, complexity, and richness of the group therapy experiences can allow to meet the current ACMGE educational re-

quirements; especially, the learning of all psychotherapy modalities. In

this article, we have described the a group therapy training program that has been used for over a decade in the Department of Psychiatry and Behavioral Sciences of the University of Texas Medical School at Houston. We hope that by presenting and discussing our didactic and clinical experiences in this group therapy program, we will further stimulate the use of such a setting for the services and educational requirements that currently prevail in the health and mental health care system of this country. Additionally, we hope that this article will also stimulate further research efforts on this unique treatment setting.

References:

1. Beresin E, Mellman L: Competencies in Psychiatry: The New Outcomes-Based Approach to Medical Training and Education. *Harvard Review of Psychiatry*, 2002; 10:185-191.
2. Scheiber SC, Kramer TAM, Adamowski SE (eds): *Core-Competencies for Psychiatric Practice: What Clinicians Need to Know*. Washington, D.C., American Psychiatric Publishing, Inc., 2003.
3. Ruiz P: Recent Advances in Graduate Psychiatric Training. *World Psychiatry*, 2003; 2(11): 57-60.
4. Sudak DM, Beck JS, Gracely EJ: Readiness of Psychiatric Residency Training Programs To Meet the ACGME Requirements in Cognitive-Behavioral Therapy. *Academic Psychiatry*, 2002; 26(2): 96-101.
5. Mackenzie KR: An Expectation of Radical Changes in the Future of Group Psychotherapy. *International Journal of Group Psychotherapy*, 2001; 51(2): 175-180.

educational and didactic point of view, group psychotherapy could be a good alternative or a good supplemental setting to learn psychotherapeutic modalities and their integration with pharmacotherapeutic interventions as required in today's graduate psychiatric training settings^{16,17}. Psychodynamic issues inherent in the group therapy process can definitely permit the development of psychotherapeutic skills via the identification and appropriate intervention during the group unconscious dynamic processes^{18,19}. Additionally, psychiatric residents exposed to group therapy can improve and enhance their clinical skills in supportive, interpersonal, cognitive-behavioral, and psychodynamic psychotherapy. Likewise, the psychiatric residents' experience as group leaders, can offer a unique opportunity to broaden and enhance their professional and personal growth, maturity, and identity⁸.

Besides, in today's managed care environment, these didactic experiences can be essential to the implementation of cost-effective psychiatric treatment interventions within an academic and high quality of care setting^{20,21,22}.

Without question, group psychotherapy experiences can enhance the psychiatric residents' psychological and interpersonal awareness, as well as help them to better understand their patients from a bi-

opsychosocial point of view, and with emphasis on the integration of psychotherapeutic and psychopharmacological interventions in a well balanced approach²³. It, additionally, enhances the image of group therapy as an ideal setting for the use of all psychotherapy modalities, as well as forestall the development of negative biases toward group therapy as an effective treatment tool¹⁸. In this context, there are certain basic principles in group therapy that must be kept in mind while using groups not only for group process purposes but for psychotherapy purposes as well. They are:

1. Develop the ability to integrate ethnic, racial, and cultural factors into the psychotherapeutic interventions used in group therapy.
2. Keep in mind at all times the use of the biopsychosocial model of psychiatric care.
3. Learn how to integrate the psychotherapeutic modalities with the psychopharmacotherapy interventions in a well balanced basis.
4. Identify and fully utilize the mechanisms of defense and the curative factors in group therapy process.
5. Identify and address unconscious psychodynamic processes in group settings.
6. Learn about the limitations of group therapy.

PGY-III resident: Tell us more; your earliest memories of him?

Chris: Let's see; he was tall, even taller than I am now. He played football in college.

PGY-III resident: Uh huh. What about you and him?

Chris: He took me to the park every Saturday; and to the circus when it came to town. My mother always said no because I was too young, but my father always said it would be fine.

PGY-III resident: What are you feeling right now?

Chris: Sad. Alone. I miss him. I wish he was here. Why did he have to die?

Group member: What else are you feeling right now?

Chris: I'm angry; it wasn't fair; I've tried to make it up to him; to show him; to take care of everything.

Group member: To be him? For your mother?

Chris: To be him; to be even better than him; in looking after everything.

PGY-III resident: Then, all you needed was him?

Chris: Uh huh (sobbing). Uh huh.

Group member: You can't change what happened. You can't be your father forever.

Group member: You did the best you could. Better than what most boys do.

As the psychodynamic interventions progressed, Chris was eventu-

ally able to attain a full sexual relationship with his girlfriend, and marry her one year later. Couple of years later, Chris wrote a letter to us stating that he was very happily married, had one son, and was quite successful in his law career.

The ongoing supervision of the two PGY-3 residents involved in this case helped the residents to learn how to appropriately utilize interpretations in the group therapy setting; to progressively uncover repressed conflicts, as well as how to help patients to develop insight and awareness vis-à-vis their unconscious psychological conflicts. Additionally, the faculty supervisor successfully taught the residents how to deal with resistances during psychodynamic treatment, as well as to identify the defense mechanisms being used by the patients in the group.

Discussion

As depicted in the two previous clinical vignettes, group therapy can be an ideal setting to learn psychotherapy modalities, pharmacotherapeutic interventions, and how to integrate both treatment approaches in a constructive, efficient, and cost-effective manner. Undoubtedly, in view of the current health and mental health care systems that predominate in this country, such a treatment model offers an ideal solution for many of the problems faced nowadays by academic institutions^{12,13,14,15}. From an

was really excited. I saw her standing there; staring at me and smiling. From then on, I moved to my bedroom.

During supervision, the faculty supervisor and the PGY-III residents recognized Chris's conflicts during the oedipal phase of development, and precipitated by the death of his father. During this developmental period, Chris had feared castration or retaliation from his father for taking his father's place vis-à-vis his mother. With his father's untimely death, Chris's infantile fears were confirmed. Symbolically, he had acted on primitive id drives, via his mother's love which led to guilt and shame. His unresolved feelings and fears regarding the loss of his father, his ambivalent feelings towards his mother, and his conflicts with sexual intimacy were now displaced to his present relationships. Furthermore, Chris projected the feared situation (sexual intimacy and its repercussions) outward (i.e. masturbation); thereby, utilizing displacement and avoidance to cope with anxiety and his unconscious conflicts.

Group therapy session #10

Chris: Like I was saying before, I always had friends. For whatever reason, girls always liked me; it's just that it never lasted. I could never make a woman happy anyway.

PGY-III resident: You mean, sexually?

Chris: Uh hum.

Group member: How do you know? Did a woman, like a girlfriend, tell you that?

Chris: No...but, it is the same tape recorder in my head. I hear it. How far did you go with this girl? Are you screwing her yet?; then, she laughs and says; you're better off looking at "dirty magazines".

PGY-III resident: Whose voice?

Chris: My mother.

PGY-III resident: So, it is still like that now? When you are with your girlfriend, are you with her or with your mother?

Chris: How did you know? Sometimes, I even see my mother's face, staring and smiling; like I said, I've never done anything dirty. I kept my promise that I would take care of everything.

Through interpretations initiated by both of the PGY-3 residents, Chris began to reflect and analyze his deep attachment to his mother. Progressively, with the utilization of psychodynamic psychotherapy, he was able to become more aware of his attachment and dependency on his mother, as well as his past early life feelings of rivalry towards his father.

Group therapy session # 15

Group member: You don't talk much about your father. What was he like?

Chris: I didn't know him much. He died when I was six.

years despite his wishes to marry her. Chris reported neither previous personal psychiatric history nor family psychiatric history. He reported a very "close" relationship with his mother, with whom he lived until age 25. He described his mother as being very controlling, over protective, and with a strong dependency on him. Chris also reported that his father died when he was six years of age. He additionally reported that since he reached adolescence, he has been able to socialize well and to sustain long periods of dating women until their relationships become very intimate. When intimacy surfaces, he became very anxious, could not sustain an erection, and masturbate rather than attempt to achieve full intercourse. He was assigned to our group psychotherapy program for treatment.

Group therapy session #5

Group member: It's Chris's turn to start today.

Chris: I can't remember where we left off last time.

PGY-III resident: Mmm...Try.

Chris: I remember about the most scary part of my life growing up; having to be a man.

Group member: Sounds scary.

Chris: Uh hum. It was bad. I remember that my mother must have been scared too; she was crying all the time. I actually thought that she may go away too; never come back. Like my father did.

Group member: Like him; your Dad?

Chris: Mmm. That's when the nightmares started. The same one every night.

PGY-III resident: Nightmares? Tell us more about that.

Chris: I would see a scary man; like a big scary monster.

PGY-III resident: Uh hmm...

Chris: I would cover my eyes like this and run; run to my parents' bedroom.

PGY-III resident: Hmm.

Chris: My mother would hug me and hold my hand until I fell asleep.

Group member: Every night?

Chris: For several weeks until the nightmares finally got better when my mother let me... this is hard. I can't say it.

PGY-III resident: Keep going, Chris. You're doing well. Remember, you're not the same little boy anymore.

Chris: The nightmares got better when I started sleeping in my parents' bedroom, but even then, they never fully went away.

Group member: This went on for how long?

Chris: It's not what it sounds like; it's not as I did anything bad.

PGY-III resident: So, you were saying, it went on.

Chris: Until I was 16. One day, my mother walked in, and I was in the bedroom. I found this "dirty magazine" at a friend's house. I was looking at the pictures and I

Lina: It's a trap. I can see that better now. But, sometimes, it's so frustrating, and I want to give up.

Group member: Lina, don't give up now. This is the first time I have seen you smile.

Lina: I feel a little better.

Group therapy session #7

(BDI 17)

Group member: Lina, How are you feeling?

Lina: (Smiling brighter). I told the children that we would sit down together every night and play a game or read a book. We should also pick out what they would wear in school and put everything in a special place so that it would be easy for them in the morning.

Group member: Did the children enjoy this extra time with you?

Lina: Uh huh. Even my husband came up to see what we were doing. He said he heard us laughing.

PGY-III resident: How do you feel?

Lina: Relieved. Maybe he's not going to leave me.

Group member: So, there are some things you can do that are positive; you're not always a failure.

Lina: I guess so.

Within the group psychotherapy format, Lina began to develop realistic goals for herself, rather than to only focus on what, as a "good mother and wife", she should be or she should not be. She worked to prioritize and master one task at a time. She also made a weekly

schedule for herself, which helped her to avoid trying to "do it all." Overtime, Lina said that she was feeling more confident; she appeared less dysphoric and anxious, and she commented that it was no longer difficult for her to fill out the BDI because she realized that she was feeling better. At this point, her BDI score was 12, and she was definitely more energetic and motivated in group. She began to recognize situations where she had "automatic, negative and critical thoughts" about herself. She also was able to examine some distortions in her underlying assumptions. As her depression improved, she reported feeling more in control over her emotions and her life. At this time, the BDI score had come down to 8.

This case permitted the faculty supervisor during the group therapy supervisory sessions with the two PGY-III psychiatric residents to discuss how to utilize cognitive-behavioral psychotherapy techniques as well as pharmacotherapy interventions in an integrated, efficient, and cost-effective way in the management of a major depressive episode in a group therapy setting.

Case Vignette 2

(Psychodynamic psychotherapy)

"Christopher was a self-referred attorney in his early 30s, who came to us because of his inability to consummate an intimate relationship with his girlfriend of three

Group member: So you're not always fair to yourself. You don't give yourself the same chance.

Lina: I guess not. I never thought of it this way before.

At this time, her antidepressant dose was increased. Lina was also asked to expand on her daily record about her most intense feelings and emotions and the situations that triggered those feelings. Her assigned homework included examining these situations for "all or nothing" thoughts that could put her in a "no-win" scenario (i.e. expectations of herself as to what she "should" be or do, rather than what was "possible" to do under the circumstances). Additionally, she was asked to rate on a scale of 0-10 each of the responsibilities that were important for her, and that were indicative that she could master them.

Group therapy session #5

(BDI 23)

PGY-III resident: What do you think of your home assignment?

Lina: I hope I don't come back here as a failure too.

Group member: You have done so well lately. I learned a lot from you. I think I do some of the "all or nothing" thinking too.

Lina: You do?

Group member: Please notice that you are helping us too.

Lina: Ok, I'll try.

Eventually, she was also assigned to rank what was most important for her to accomplish during the

day, and bring it to the group for discussion. On the next session, Lina brought a long list of tasks that she felt were solely her responsibility.

Group therapy session #6
(BDI 20)

PGY-III resident: What feedback do we have for Lina?

Group member: This list is so long--no wonder you don't know where to start.

PGY-III resident: Do we have any suggestions for Lina?

Group member: I was thinking back to when my children were young. I used to involve them in a routine of tasks during the morning hours, when they came back from school and also before bedtime. For example, before bedtime, we picked out what they wanted to wear to school the next day. We also laid out the school homework.

Group member: You are also teaching your older children to be responsible and helpful to you.

Lina: I would enjoy spending the extra time with them too.

PGY-III resident: Let's focus only on one task at a time. Lina, what are you thinking now?

Lina: I think I can do this one thing. I was afraid that I would have to do too much.

PGY-III resident: Lina, that's the "all or nothing" thinking again; either you are a superwoman or a failure.

the previous week, and which led to feelings of depression, guilt, hopelessness, anger, and apathy. During this group therapy session, Lina was asked to expand on the situations that caused her the most distress.

Lina: (tearfully) I let them all down. I know everyone thinks that "I am not a good wife and mother."

PGY-III resident: Is that really true?

Lina: I ruined our dinner. Everything was burned. The baby was crying and I forgot to turn off the stove.

PGY-III resident: Thus, when something like this happens, what are your thoughts about yourself?

Lina: (quietly) I messed up again. It was all my fault. My children and husband deserve better. They even tried to cheer me up, and my husband suggested that we go out for pizza.

PGY-III resident: And?

Lina: (silence) He was saying that to make me feel better. Anyway, he deserves better than a failure like me.

Group member: How did you react when you were thinking about this?

Lina: I ran into our room and started crying. I couldn't let the children see me like that--I felt so depressed and alone.

Group member: So, it's "all or nothing" for you--a "no-win" situation. Either everything needed to

be perfect or you have failed as a wife and mother.

Group member: You said the baby was crying---what happened?

Lina: Well, the baby had been sick with a cold and is still a little cranky. He was fine though, but needed more attention.

Group member: Looking after 2 children and one of them being a six month old is a lot for your shoulders.

Group member: Your husband didn't seem to mind too much. It was nice of him to offer to take everyone for pizza.

PGY-III resident: Lina, what are your thoughts about the comments from the group members?

Lina: They're trying to be nice; make excuses for me. This is what every good mother should do--take care of her family.

PGY-III resident: So no one cares? Not your husband? Not any of the group therapy members?

Lina: I didn't say that.

PGY-III resident: This is what was pointed out to you earlier, the "all or nothing thinking—a no win situation. No wonder it's hard not to feel depressed and lonely. I wonder what you would have said to a friend who was in the same situation than you before you started feeling depressed ?

Lina: (improved eye contact). I guess I would have said that anyone can make mistakes.

and measure her symptoms of depression.

On the group psychotherapy session #1 (BDI 36), the patient was instructed by one of the two PGY-III psychiatric residents assigned to this group to keep a daily activity log and to regularly bring this log to the group therapy sessions.

On group therapy session #2 (BDI 34), a review of her weekly activity schedule revealed the following:

Monday-Friday

6:00-8:00 a.m. awoke, dressed, fed infant, got older child ready for school.

8:00-9:00 a.m. lied down, worried, and cried.

9:00-12:00 noon tried to do dishes, washed clothes, straightened up the house, fed infant, thought about what she will fix for dinner.

12:00-1:00 p.m. tried to have lunch.

1:00-3:00 p.m. tried to watch TV, lied down exhausted because of poor sleep the previous night, tried to take a nap with her infant child, cried.

3:00-5:00 p.m. older child returned from school; sat down with him; "forced myself" to take out frozen dinner for supper.

5:00-7:00 p.m. fed children, lied down exhausted and overwhelmed, even though "I didn't do anything" as soon as husband returned from work.

7:00-9:00 p.m. tossed and turned in bed, cried, felt guilty at not caring for her family.

9:00-midnight pretended to be asleep to prevent arguments with her husband.

On weekends, she tried to catch up with the household chores from the week, and rejected any family activities (i.e. go to the park) because she was "too tired." In group therapy session #3 (BDI 30), Lina was asked to keep a daily record of her most intense feelings and emotions (i.e. sadness, anxiety, guilt, feeling overwhelmed, wanting to give up, etc.), and what situation/s triggered those feelings. At the same time, she was to describe the thoughts about herself that preceded these emotions. The group therapy members, the faculty supervisor, and the two PGY-III psychiatric residents acknowledged Lina's sense of being overwhelmed when attempting to care for her two young children and her husband. During the post group therapy supervisory period, the PGY-III psychiatric residents identified that the main theme of Lina's negative cognitive fears was her distorted belief that she was failing as a wife and mother. They also recognized that Lina was unable to organize and prioritize her daily household responsibilities, which further compounded her sense of "failure".

Group therapy session #4
(BDI 25)

During group therapy session #4 (BDI 25), Lina brought in a list of 10 situations that took place over

The Clinical and Educational Experience

During our ten years of experience in this group therapy program, our educational objectives have been to teach PGY-III psychiatric residents to learn about group psychotherapy process, group psychotherapy modalities, and the integration of pharmacotherapy and psychotherapy in a cost-effective basis. In this context, we would like to present and discuss some clinical examples about the psychotherapy experiences, as well as the integration of the psychotherapy and pharmacotherapy modalities within this group therapy program. For this purpose, we will use clinical vignettes.

Case Vignette 1

(Cognitive-Behavioral Psychotherapy, Supportive Psychotherapy, and Combined Psychotherapy and Pharmacotherapy).

"Lina was a married, Hispanic, woman in her early 30s, with two children. She had recently experienced feelings of depression following the birth of her last child six months earlier. Her symptoms were despair, anger, fears of losing control, and neurovegetative signs of depression such as: terminal insomnia, loss of appetite, a fifteen pound weight loss, crying spells, and decreased libido. She described herself as someone "who can't do anything right." In addition, she expressed feelings of insecurity and fears of not being a good

mother. She felt that she had a "negative attitude" about not being able to be a loving wife and mother, and that her children and husband deserved "someone better." She briefly considered suicide, but felt that this was against her Catholic religious beliefs. She confided her fears and feelings to a close friend who recommended her to seek treatment in our program.

As part of the initial psychiatric evaluation, a Beck Depression Inventory (BDI) was administered. Lina's BDI score was 39; thus, consistent with a severe major depressive episode. A decision was made to assign her to a mood/anxiety group therapy program. She was also started on 20 mg of fluoxetine hydrochloride; additionally a cognitive-behavioral psychotherapy-treatment plan was decided for her. In this context, the group therapy faculty supervisor and two PGY-III psychiatric residents oriented Lina about the basis of cognitive-behavioral psychotherapy and the relationship between thinking, feeling, and behavior vis-a-vis her depression. The role of homework and the importance of training herself to self-monitor her thoughts, feelings, and behaviors as a crucial component of her treatment was also discussed with her. Additionally, she was instructed to arrive fifteen minutes prior to every group therapy session to complete a new BDI in order to review, monitor,

apy, psychodynamic psychotherapy, supportive psychotherapy, and combined psychotherapy and pharmacotherapy⁴. Obviously, the ACGME "core competencies-model" has had a significant impact on all graduate training programs and, in so doing, has led to major challenges as well as opportunities in this new training environment.

In this educational context, a group therapy training rotation, enriched with a strong didactic component could certainly offer a cost-effective and efficient way to train psychiatric residents in all of the ACGME required psychotherapy modalities. Along these lines, the utilization of psychotherapy as a treatment modality has already been found to be as effective in group psychotherapy settings as it is in individual psychotherapy^{5,6}. Additionally, group therapy has been successfully applied as a treatment modality with heterogeneous patient populations, including those suffering from mood disorders, anxiety disorders, eating disorders, personality disorders and schizophrenia⁷⁻⁹. In the past, much has been written with respect to the role of group therapy in graduate training in psychiatry^{10,11}. It is our opinion, however, that group therapy has still a lot to offer in today's graduate psychiatric training environment; certainly, group therapy can be cost-effective and can also provide evidence-based psychotherapeutic interven-

tions; additionally, it could also be useful in offering training experiences in numerous psychotherapeutic modalities. Learning how to integrate psychopharmacotherapy with psychotherapy within the context of group therapy can additionally offer psychiatric residents with the opportunity to integrate the psychosocial and biological domains of group therapy treatment within a cost-effective as well as efficient environment. In many graduate training programs in psychiatry what currently prevails is a fragmented experience in which residents are exposed to a medication management model, in either an inpatient or outpatient setting, with little opportunity to learn the value and relevance of the use of psychotherapy, as well as psychotherapy and psychopharmacology in an integrated fashion⁶.

In this article, we will describe a group therapy training program designed and implemented in the Department of Psychiatry and Behavioral Sciences of the University of Texas Medical School at Houston to specifically provide psychiatric residents with an efficient treatment experience in all ACGME required psychotherapy modalities. Additionally, this group therapy training program also offers an opportunity to appropriately learn how to integrate psychotherapy and pharmacotherapy treatment within the same treatment setting.

Psychiatric Education:

Teaching Psychotherapy in a Group Therapy Setting: Current Perspectives

*Anu A. Matorin, and Pedro Ruiz.**

الرؤيا الحالية : تدريب العلاج النفسي في إطار العلاج الجماعي
أنوماتورين، وبيدرو رويز

Abstract

Graduate psychiatric training in the United States and in other industrialized nations such as Canada, England, and Germany is currently undergoing a major transformation. As a paramount expression of these changes, the Accreditation Council for Graduate Medical Education (ACGME) has recently began to require that all modalities of psychotherapy be taught in all of their accredited graduate training programs in psychiatry in this country. In a parallel fashion, the current managed care influences as well as the current strives toward evidence-based medicine have pressured graduate training programs, including psychiatry, to provide services in the most cost-effective manner.

In this context, a group therapy program was designed and developed in the Department of Psychiatry and Behavioral Sciences of the University of Texas Medical School at Houston since the early 1990s. This permitted the training of psychiatric residents in a psychotherapeutic setting that can also provide high quality of psychiatric care in a cost-effective basis. We hope that in addressing the experiences ascertained in this training program during the last ten years, other graduate training programs in psychiatry across this country could learn from our experiences and thus consider utilizing this training and service model in their attempts to comply with today's ACGME expectations within a managed-care environment.

Introduction

Graduate training programs in the United States have recently undertaken a major educational shift toward training outcomes that can be objectively demonstrated and measured via core competencies initiatives^{1,2,3}. Within this

contemporary educational context, graduate training programs in psychiatry need to demonstrate that psychiatric residents have achieved competency in at least five modalities of psychotherapy upon graduation; that is, brief psychotherapy, cognitive-behavioral psychother-

النتائج.

- مجموع الحالات التي تم إحالتها خلال فترة الدراسة بلغت (198) حالة:
- (1) متوسط أعمارهم كانت ما بين (30 - 40) سنة.
 - (2) أغلب الحالات كانت لها تاريخ مرضي سابق للجريمة (60.6%)
 - (3) (27.3%) كان لديهم سجل إجرامي سابق و (18%) لديهم تاريخ مرضي عائلي إيجابي.
 - (4) أنواع الإضطرابات النفسية كانت بالنسب التالية: (42.41%) فصام (28.8%) هوس (18.7%) اضطرابات الضلالات (7.1%) إكتئاب (2.5%) اضطرابات عصابية و (0.5%) اضطرابات عضوية.
 - (5) الجرائم المصاحبة لهذه الإضطرابات كانت كما يلي: إعتداء جسدي (38.4%) قتل (29.3%) سرقة (15.6%) جرائم جنسية (8.6%) ومحاولات قتل (8.1%).
- الخلاصة:

إن هذه الدراسة الوصفية التاريخية لخدمات الطب النفسي القضائي والتي هي الأولى من نوعها في اليمن، قد توصلت إلى عدة توصيات تهدف إلى تحسين خدمة وممارسة الطب النفسي القضائي، كما وجدت بأن نقص الوعي بالإضطرابات النفسية وعلاجها في المجتمع اليمني وعدم الإلتزام باستخدام العلاج وتعاطي القات بشكل مفرط وسهولة الحصول على السلاح الناري كلها عوامل مصاحبة لإرتكاب المرضى العقليين في هذه العينة للجرائم المذكورة. علماً بأن هناك حاجة لدراسات مستقبلية في هذا المجال وفي وجود ضوابط ومقارنة للتوصل إلى نتائج أكثر دقة.

*Correspondence:

Abdul-Elah H. Aleryani

Sana'a University, School of Medicine

Psychiatry Department

Sana'a - Yemen.

- 361- 408. Calare don press, Oxford.
- 4- Aleryani, A.H., Pathway to psychiatric care in Yemen, 2001. Current psychiatry. Vol. 8, No. 2: 203- 209.
- 5- Linderist P, Allebeck P 1990 Schizophrenia and crime: a longitudinal follow up of 644 schizophrenia in Stockholm. British journal of psychiatry 157:34 5-35
- 6- Swanson J W, Holzer, C E, Ganju V k, Jona R T 1990, violence and Psychiatric disorder in the community: evidence from the epidemiological catchments area surveys. Hospital and community psychiatry 147:491-498
- 7- لطفي الشربيني (1997) حقوق المريض النفسي: ملاحظات مهنية اوليه، وثيقة اساسية لمنظمة الصحة العالمية المشاورة البلدانية حول تشريعات الصحة النفسية. الكويت 1997

Table 1
Diagnostic features and associated crimes

Diagnosis	Murder	Attempted murder	Theft	Assault	Sexual crimes	Total	%
Schizophrenia	34	7	12	26	5	84	42.4
Mania	3	--	16	29	9	57	28.8
Delusional disorder	10	8	--	19	--	37	18.7
Depression	11	--	1	2	--	14	7.1
Neurotic disorder	--	--	2	--	3	5	2.5
Organic disorders	--	1	--	--	--	1	0.5
Total	58	16	31	76	17	198	100
	29.3	8.1	15.6	38.4	8.6	100	

الملخص:

هدف الدراسة:

فحص العوامل الديموغرافية وأنواع الإضطرابات النفسية والجرائم المصاحبة لها للمرضى المحالين إلى اللجنة النفسية القضائية في مصحة السجن المركزي بصنعاء في الفترة من يناير 2003م إلى ديسمبر 2004م.

طريقة الدراسة:

تم فحص كل اليمنيين البالغين المتهمين بجرائم ومحالين من الجهات المختلفة لتقييم حالتهم العقلية إلى اللجنة النفسية القضائية في السجن المركزي. سجلت بياناتهم الديموغرافية، تشخيص حالتهم العقلية والجرائم المصاحبة لها و وضعت كل هذه البيانات في جداول الخاصة.

In the future studies we should evaluate the socio-demographic and psychiatric characteristics of prisoners in the Sana'a prison as non offenders as a control group for comparison. Also the statistical correlation between crimes and firearms and or the use of qat in Yemen must be pointed at as a future research demand. Similar studies in our Arab culture should also found for comparison.

Conclusion

This study has raised a number of issues regarding mentally abnormal offenders and practice of forensic psychiatry in Yemen. These are:

- The place in which mentally abnormal offenders are usually detained is an old section in the central prison of Sana'a. It is an unhealthy place and there is a lack of sufficient medical and environmental facilities. It is a stigma in Yemeni society and should be replaced as soon as possible by a new modern psychiatric hospital or department outside the prison.
- It is necessary to issue a Mental Health Act in Yemen which

would help in preventing human right violation of mentally ill and protect the community from possible offending behaviors.

- All murders or attempted murders were committed by firearms available in the homes of mentally ill offenders which might have been an important factor to facilitate such crimes. Excessive chewing qat and noncompliance with medication before crimes were also might be significant factors associated with mentally ill offender's crimes in Yemen.
- These associated factors can be minimized by introducing a good mental health education for family and community about mental illnesses and their treatment as well as possible hazards of excessive chewing qat. Meanwhile, strict control on selling firearms and their presence at homes should be enforced.

Lastly, this study which is the first of its kind should stimulate further studies in the future about practice of forensic psychiatry in Yemen

References:

- 1- Kaplan and Sadock's., Forensic Psychiatry. Synopsis of Psychiatry. Mass publishing co. Egypt (Middle East Edition 1998) p. 1305
- 2- WHO 1992, International Classification of Diseases, Tenth Revision, World Health Organization, Geneva
- 3- Farrington, D.P., 1997. Human development and Criminal careers. In The oxford hand book of criminology (2nd edition). Pp.

Schizophrenia was the most common identified mental disorder in our study representing 42.4% of the total. Murder, assault and attempted murder were the most common associated crimes among them. American and Swedish Studies found an association between Schizophrenia and violence^{5,6}.

Affective disorders were less common; mania represented (28.8%) and associated with crimes of theft and assault, while depression was (14%) and associated mainly with murder crimes. Delusional disorders were not uncommon representing 18.7% of the total and they were associated mainly with crimes of murder, attempted murder and assault.

Lastly neurotic and organic disorders were uncommon; they were 2.5%, 0.5% respectively. Neurotic disorders were all associated with personality problems characterized by neurotic traits, long standing difficulty in relationships and drug abuse. The case of organic disorders was epileptic (Generalized tonic-clonic type) associated with mild learning disability.

The details and nature of these crimes is not the interest of this study. Meanwhile, we should mention that we found nearly all of these crimes were associated with excessive chewing qat (i.e. qat is prior to anything, chewing is day and night for 12 hours and above, and usually alone) and non-

compliance with medication as well as easy availability of gun fire arms in Yemeni society.

During the study period a number of communication difficulties between the committee and courts have occurred probably due to the following:

- 1- Lack of courts with basic knowledge of modern psychiatry
- 2- Ignorance of members of forensic committee with Islamic shari'a concepts of minds, insanity, legal responsibility and mental competence.⁷
- 3- Courts and prosecutors offices used to refer cases to the committee without clear details about the natures and circumstances of crimes committed by mentally abnormal offenders which made it difficult for committee to report back easily. It is worth mentioning that during the study period 4 cases committed suicide and 7 made a serious attempted suicide in the forensic psychiatric unit in the central prison in which mentally disordered offenders are detained. This is mainly because this unit as mentioned before is not a suitable place medically or environmentally for detaining such patients. It lacks sufficient staffs for medical supervision and should be replaced as soon as possible by a modern psychiatric unit outside the prison.

Discussion:

It is worth mentioning that the cases of our study may not be necessarily a representative sample for the size and type of all mentally ill offenders in Yemen. This is because of two reasons, firstly; there are other three forensic committee in governorates of Aden, Taiz and Hodiada in which, the referred cases have not been included in this study, secondly, it is well known that a great number of crimes including those committed by mentally ill in Yemeni culture are usually solved through tribal law and never reach the authorities.

The number of mentally ill female offenders was too little to be included in this study. There were only six referred cases; five cases were suffering from manic illness and one from learning disability. All of them ran away from home and were accused of prostitution. The under representation of female offenders can be explained by the fact that families will tend to hide such cases for fear of stigma.

The peak frequency of our study group is in the range 15-29 representing 45.5% of the total which is consistent with the fact that crime is predominantly an activity of young men³. The majority of our cases were employed (77.8 %) but most of them were actually farmers working in their own families' farms; 133 cases (86.4%). The rest

were either solider or holding governmental jobs.

52% of them were married, early marriage is common in Yemen and a great number of them; 153 (77.3%) married during the course of their mental illness .The cultural belief that marriage can cure mental illness, the great tolerance of Yemeni society towards mentally ill people, as well as the prevalence of arranged marriage for young girls without their consent have predisposed to such unequal marriages.

Most of our cases come from rural areas (66.7%), probably because patients living in rural areas are less likely to be diagnosed early or receive regular treatment and their families are more tolerant to the illness and behaviors of their patients.

Only 60.6% of mentally abnormal offenders in this study were seen and treated by psychiatrists before they committed their crimes but all of them were not compliant with medication or follow up. Meanwhile all of them made their first contact and treated by native healers. This is because of the cultural belief that mental disorders are due to spiritual causes ⁴.

Family history of mental disorders (73.3%) and past criminal record (26.3) were useful by the committee to help in the diagnoses of the referred cases and assess their seriousness.

medicine, one from the Ministry of Health and the fourth is the resident doctor in the forensic mental unit. The committee meets weekly in special room in the central prison of Sana'a. We usually see two to four old and new patients each time. . The interview takes 20-40 minutes and diagnoses were put according to ICD10 criteria². Some of them are accused of major crimes like murder, others with minor ones like theft. The patients are referred to the committee from different courts and prosecution offices all over Yemen through the forensic department in the office of the General Prosecutor, direct referral is not acceptable. They are usually referred either because they have shown abnormal behavior and talk during interrogation or that the their family and defendants claim that they are mentally ill .The court usually wants to know whether or not the accused persons is mentally ill, his mental state at the time of the crime, his responsibility for his crime, whether his illness had occurred before or after the crime and the possibility of malingering behavior. This prospective study was conducted for a period of two years from Jan. 2003 to Dec. 2004.

Results

During the study period, a total of 198 mentally ill offenders were referred to the committee. The number includes only Yemeni adult

males who attended for the first time. Foreigners and females were excluded. age distribution wise, the peak frequency is in the range 30-40 years old which represents (45.5%). Employment wise; the majority of them were working (77.8%); 83.2% farmers, 11.6 soldiers, and 6.2 others. Marital status shows that 52%of the group was married, 42.4% singles, and 5.6% divorcee. the residency of our study group shows that the majority of them come from Sana'a governorate (78.3), only (21.7) were from the other governorates Most of the cases were referred from prosecution offices (89.4). Only (10.6%) were referred from courts. The majority of the patients have had history of mental illness before the crime (60.6%).Meanwhile (73.7%) of the subject group had no previous criminal records and that only 18.7% of them had positive family history of mental disorders. Table (1) illustrates the diagnostic features of our study group and associated crimes with them. The identified diagnoses were as follows; schizophrenia (42.4%), mania (28.8), delusional disorders (18.7), depression (7.1),neurotic disorders (2.5),and organic disorders (0.5) .Meanwhile the associated crimes include; assault (38.4), murder (29.3),theft (15.6), sexual crimes (8.6) and attempted murder (8.1).

majority of committed crimes. Further future studies are needed in this newly developed branch of psychiatry in Yemen.

Introduction:

Forensic psychiatry conventionally refers to the services of professionals who evaluate cases and testify in court about legal matters such as competency determinations, criminal responsibility, and malpractice litigation. Forensic psychiatry thus deals with mental disorders as related to legal principals¹.

In Yemen, there were no official forensic psychiatric services until year 2000 when the General prosecution office together with the Ministry of health established the first committee of forensic psychiatry.

In Sana'a, capital of Yemen, mentally ill offenders are usually detained in a special mental health unit inside the central prison of Sana'a. It is run by the prison' administration whereas medical and technical services are provided by the ministry of health. Unfortunately this unit has represented a medical stigma in the community and has been always a subject of public criticism because it is crowded, unhealthy place, has no sufficient medical or social services and lies within a prison. Their admission in such place is considered as a type of human rights violation of mentally ill patients. In 1995 the International committee of Red Cross in Sana'a had to intervene to improve the situation of this unit firstly by introducing some envi-

ronmental changes to make it a more hygienic place and secondarily by recruiting additional team of doctors, nurses, psychologists, and Yemeni Red Crescent volunteers to work in the unit throughout the day. Since then, the conditions in the unit have to some extent improved. However, there is still much to be done and a new modern forensic psychiatric unit preferably out side the prison should be built in the near future. The country is also in need for a special law for mentally ill patients (Mental Health Act) to protect their rights as well as protect the community from their possible dangerous behaviors.

In this study we will review the work of Forensic psychiatry Committee in this unit during two years (2003, 2004) to describe the socio-demographic and diagnostic features of mentally ill offenders who are presented to our committee and to discuss difficulties, obstacles, and communication problems with judges and other related authorities that have faced the committee during this period which might help improving its work in the future.

Patients and methods:

The Committee of Forensic Psychiatry is consisting of four doctors, one psychologist and the chief nurse in the forensic mental unit, two doctors from the faculty of

Descriptive Study for Mentally Disordered Offenders Attended the Forensic Psychiatric Unit in the Central Prison / Sana'a City- Yemen.

Abdul-Elah H. Aleryani, Abdul Kareem Salam, Esa AbdulWalee,

دراسة وصفية للمجرمين المضطربين نفسياً الذين وصلوا الى
وحدة الطب النفسي القضائي في السجن المركزي في مدينة
صنعاء- اليمن.

عبدالإله الإيرياني، عبد الكريم سلام وعيسى عبد الوالي

ABSTRACT

Objective: To investigate the socio-demographic, diagnostic types and associated crimes of mentally disordered offenders referred to the forensic psychiatric committee in the central prison / Sana'a city during the period from January 2003 to December 2004.

Patients and Methods: All Yemeni male, adult, mentally disordered offenders referred during the study period were examined and their socio-demographic data, diagnosis, and associated crimes were recorded and tabulated.

Results

1. A total of 198 mentally ill offenders were referred to the committee.
2. The peak frequency is in the range 30-40 years old. (45.5%)
3. The majority of the patients have had history of mental illness before the crime (60.6%).
4. 27.3% had previous criminal records and 18.7% with positive family history of mental disorders
5. The identified diagnosis were as follows schizophrenia (42, 4%), mania (28.8%), delusional disorders (18.7%), depression (7.1%), neurotic disorders (2.5%) and organic disorders (0.5%)
6. The associated crimes include assault (38.4%), murder (29.3%), theft (15.6%), sexual crimes (8.6%) and attempted murder (8.1%).

Conclusions:

This descriptive study for forensic psychiatric services, which is of its first kind in Yemen, has raised a number of issues and recommendations for improving practice of forensic psychiatry in Yemen. It has also found that lack of mental health education in the community, non compliance with medication, excessive chewing qat by mentally ill offenders , as well as their easily access to firearms in Yemen were all associated factors in the

- phrenia: women and men. *Canadian Journal of Psychiatry*, 45(6): 544-7.
36. Angermeyer M C and Kuhn (1988), Gender differences in age of onset of schizophrenia: An overview, *Eur Arch Psychiatry Neurol Sci*, 237(6): 351-64.
37. Warren C A B (1983), Mental illness in the family: A comparison of husbands and wives, *J Fam Issues*, 4: 533-558.
38. Jablensky A and Cole S W (1997), Is the earlier age of onset of schizophrenia in males a con-
- founding findings? *British Journal of Psychiatry*, 170: 234-240.
39. Hafner H, Maurer K, Löffler W, et al (1993). The influences of age and sex on the onset and early course of schizophrenia, *British Journal of Psychiatry*, 162: 80-86.
40. Lewis S (1992), Sex and Schizophrenia: vive le difference, *Br. J Psych*, 161: 445-50.
41. Pantelis C (1992), Sex and Schizophrenia: vive le difference (letter). *Br J Psych* 19 162: 258-9.

الملخص :

الأهداف: تحديد الفروقات بين الذكور والإناث فيما يخص أعراض الإصابة والعمر عند بدء الإصابة بالفصام لدى المرضى البحرينيين.

الأساليب: تم اختيار 112 مريض بالفصام من المرضى الذين شاركوا بدراسة متعلقة بالوراثة وتم تطبيق قائمة الـ OPCRIT 3.31 كأداة تشخيصية. تم تحليل عناصر OPCRIT لدراسة الفروقات بين الذكور والإناث المصابين بالفصام.

النتائج: لم تظهر الدراسة أية فروق ذات أهمية بين الذكور والإناث المصابين بالفصام فيما يتعلق بمعدل إنتشار الأعراض والعمر عند الإصابة بمعنى "العمر عند اللجوء للطب النفسي أو العمر عند ظهور خلل في الأداء الوظيفي أو التأثير الشخصي" لدى المرضى البحرينيين. هذه النتيجة وجدت لدى كلا من المرضى الذين لديهم تاريخ عائلي بالمرض والذين يفترضون لهذه التاريخ العائلي. وقد وجد أن قائمة الـ OPCRIT 3.31 أداة تشخيصية موثوقة لتشخيص مرض الفصام في الرجال والنساء بدرجة متساوية.

الخلاصة: بينما يوجد إجماع على عدم وجود فروق في معدل إنتشار الأعراض بين الذكور والإناث المصابين بالفصام ، لا يوجد مثل هذا الإجماع على العمر عند بدء الإصابة بين الجنسين، لذلك يجب الحذر عند تحليل الدراسات المتعلقة بهذه النقطة حتى ظهور تعريف دقيق لمصطلح العمر عند الإصابة بالفصام.

*Correspondence

Dr. Alaa Alsadadi, ABPsych.

aalsadadi@hotmail.com

Psychiatric Hospital, P.O. Box 5128, Manama, Bahrain

- ses, *The British Journal of Psychiatry* 169: 58-63.
23. Williams J, Farmer AE, Ackenheil M, Kaufmann CA and McGuffin P (1996), A multicentre inter-rater reliability study using the OPCRIT computerized diagnostic system, *Psychol Med.*, 26(4):775-83.
24. McGuffin P, Farmer A and Harvey I (1991), a polydiagnostic application of operational criteria in studies of psychotic illness. Development and reliability of the OPCRIT system, *Arch Gen Psychiatry*, 48:764-770.
25. Fahmi A, Al Haddad MK and Fateha B (2001), Efficacy of Risperidone in the treatment of chronic schizophrenia in Bahrain, *Journal of Bahrain Medical Society*, 13(4): 176-181.
26. Al Haddad MK and Ezzat A (1999), Prevalence of negative symptoms in chronic schizophrenia, *Bahrain Medical Bulletin*, 21(2): 39-41.
27. Maslaoshi-J (1986) Pathoplastic influences on symptoms of schizophrenia: A comparative study in Libya and Malta. *Acta-Psychiatr-Scand*, 73(6): 618-23.
28. Wahl OF and Hunter J (1992), Are gender effects being neglected in schizophrenia research? *Schizophr Bull*, 18(2): 313-8.
29. Folnegovic Z and Folnegovic-Smaic V (1994), Schizophrenia in Croatia: age of onset difference between males and females. *Schizophrenia Research* 1994, 14:83-91.
30. Nyman AK (1978), Non-regressive schizophrenia: clinical course and outcome. *Acta Psychiatr Scan*, Suppl. 272.
31. Takahashi S, Matsuura M, Tanabe E, Yara K, Nonaka K, Fukura Y, Kikuchi M, Kojima T (2000) Age at onset of schizophrenia: gender differences and influence of temporal socioeconomic change, *Psychiatry Clin Neurosci.*, 54(2): 153-6
32. Hafner H and an der Heiden W (1997), Epidemiology of schizophrenia, *Canadian Journal of Psychiatry*, 42(2): 139-51.
33. Loranger AW (1984). Sex difference in age of onset of schizophrenia. *Archives of General Psychiatry*, 41: 157-161.
34. Shimizu A, Kurachim M, Noda M, et al (1988), Influence of sex on age of onset of schizophrenia, *Japanese Journal of Psychiatry and Neurology*, 42: 35-40.
35. Cohen R Z, Gotowiec A and Seeman M V (2000), Duration of pretreatment phases in schizo-

- Arch Gen Psychiatry*, 47(11): 1008-15.
12. Laakso A, Vilkkumäki H, Bergman J, Haaparanta M, Solin O, Sivalahti E, Salokangas R K and Hietala J (2002), Sex differences in striatal presynaptic dopamine synthesis capacity in healthy subjects. *Biol Psychiatry*, 52(7):759-63.
 13. Weiser M, Reichenberg A, Rabinowitz J, Kaplan Z, Mark M, Nahon D and Davidson M (2000), Gender differences in premorbid cognitive performance in a national cohort of schizophrenic patients. *Schizophr Res*, 45(3):185-90.
 14. Cadenhead K S, Geyer M A, Butler R W, Perry W, Sprock J and Braff D L (1997). Information processing deficits of schizophrenia patients: Relationship to clinical ratings, gender and medication status. *Schizophr Res*, 28(1):51-62.
 15. Hintikka J, Saarinen P, Taniskanen A, Koivumäki-Honkanen H and Viinamäki H (1999), Gender differences in living skills and global assessment of functioning among outpatients with schizophrenia. *Aust N Z J Psychiatry*, 33 (2):226-31.
 16. Leung A and Chue P (2000), Sex differences in schizophrenia: a review of the literature. *Acta Psychiatr Scand Suppl.*, 401:3-38.
 17. Kendler K S and Walsh D (1995), Gender and Schizophrenia: result of an epidemiologically based family study. *British Journal of Psychiatry*, 167:184-192.
 18. Josiassen R C, Roemer R A, Johnson M M and Shagass C (1990), Are gender differences in schizophrenia reflected in brain event-related potentials? *Schizophrenia Bulletin*, 16:229-246.
 19. Walker E F and Lewine R R (1993) Sampling biases in studies of gender and Schizophrenia. *Schizophrenia Bulletin*, 19:1-7.
 20. Zarrouk-E T (1978), the usefulness of first-rank symptoms in the diagnosis of schizophrenia in a Saudi Arabian population, *Br-J-Psychiatry*, 132:571-3.
 21. McGuffin P and Farmer A (2001), Polydiagnostic approaches to measuring and classifying psychopathology, *American Journal of Medical Genetics*, 105:39-41.
 22. Craddock M, Asherson P, Owen M J, Williams J, McGuffin P and Farmer A E (1996), Concurrent validity of the OPCRIT diagnostic system. Comparison of OPCRIT diagnoses with consensus best-estimate lifetime diagnosis

References:

1. WPA online education, Schizophrenia, MODULE 1: CLINICAL PRESENTATION, Contributors: Nancy C. Andreasen, Driss Moussaoui, and Yoshiyumi Nakane. <http://www.wpanet.org/sectorial/edu4c2.html>
2. Andreasen N C (2000), Schizophrenia: the fundamental questions. *Brain Res Rev.*, 31(2-3):106-12.
3. Norquist G S and Narrow W (2000), Schizophrenia: Epidemiology. In Sadock B J & Sadock V A (Ed.) *Comprehensive Textbook of Psychiatry*, Seventh Edition on CD-ROM, Philadelphia, USA. Lippincott Williams and Wilkins.
4. Goldner EM (2002), Prevalence and incidence studies of schizophrenic disorders: a systematic review of the literature. *Can J Psychiatry*, 47(9): 833-43.
5. Karam E G (1996), The Mental Health Research in the Arab World (1966 – 1996), *The data base is from Medline Express (1966 to July 1996): Clin PSYC (1980-June 1996), EMBASE (1984 - June 1996), CINAHL (1982 - June 1996), and BA/RRM on CD (1994 - June 1996).*
6. Abdul Karim M and Al Haddad MK (1998), Incidence of Schizophrenia at first admission in Bahrain. *Egypt J Psychiat*, 21(1): 95-100.
7. Al Haddad et al (1991), Profile of psychiatric in-patient population in Bahrain, 1983 – 1987. *Bahrain Medical Bulletin*, 13(1): 24-29.
8. Nopoulos P C, Rideout D, Crespo-Facorro B, and Andreasen N C (2001). Sex differences in the absence of massa intermedia in patients with schizophrenia versus healthy controls. *Schizophr Res.*, 30; 48(2-3):177-85.
9. Bryant N L, Buchanan R W, Vldar K, Breier A and Rothman M. (1999), Gender differences in temporal lobe structures of patients with schizophrenia: a volumetric MRI study. *Am J Psychiatry*. 156(4):603-9.
10. Hoff A L, Neal C, Kushner M and DeLisi LE (1994), Gender differences in corpus callosum size in first-episode schizophrenics. *Biol Psychiatry*, 15; 35 (12):913-9.
11. Andreasen N C, Swayze V W, Flaum M, Yates W R, Arndt S and McChesney C (1990), Ventricular enlargement in schizophrenia evaluated with computed tomographic scanning: Effects of gender, age, and stage of illness.

Table 2: Distribution of symptoms of schizophrenia by gender

Symptoms		Gender		
		Male	Female	P-value
Mode of onset	Acute	40	15	0.339
	Chronic	36	20	
Positive formal thought disorder	Absent	21	11	0.712
	Present	54	24	
Negative formal thought disorder	Absent	24	12	0.848
	Present	50	23	
Persecutory delusion	Absent	8	0	0.054
	Present	68	35	
Well organized delusion	Absent	36	18	0.691
	Present	40	17	
Delusion of influence	Absent	24	14	0.385
	Present	52	21	
Bizarre delusion	Absent	46	23	0.601
	Present	30	12	
Widespread delusion	Absent	40	23	0.167
	Present	36	13	
Delusion of passivity	Absent	24	16	0.150
	Present	52	19	
Primary delusional perception	Absent	59	26	0.699
	Present	17	9	
Other primary delusion	Absent	67	33	0.497
	Present	0	2	
Thought insertion	Absent	29	18	0.189
	Present	47	17	
Thought withdrawal	Absent	13	19	0.189
	Present	45	16	
Thought broadcast	Absent	33	20	0.179
	Present	43	15	
Thought echo	Absent	65	29	0.717
	Present	11	6	
Third person auditory hallucinations	Absent	2	2	0.589
	Present	74	33	
Running commentary voices	Absent	13	9	0.290
	Present	63	26	
Abusive\accusatory\ persecutory-voices	Absent	16	13	0.08
	Present	59	22	
Other non-affective Auditory hallucinations	Absent	53	26	0.623
	Present	23	9	
Non affective hallucination in any modalities	Absent	32	13	0.621
	Present	44	22	

we are talking about insidious onset schizophrenia that represents 50% of the sample. The results of this study illustrated that there is no difference between males and females in the time of seeking psychiatric advice and/or the time of functional impairment. This is contrary to what has been observed in western societies where relatives of female patients recognize their symptoms more slowly and are slower in seeking psychiatric help^{36, 37}. This indicates either that seeking psychiatric help for females in our society is faster than in western societies or seeking psychiatric advice for both males and females is facing the same level of stigma, thus delaying it for both to the same extent. Further research is needed in this area.

Consistent with other studies of gender differences in schizophrenia^{17, 39}, this study found no difference in the prevalence of the studied symptoms of schizophrenia between males and females. Moreover, this lack of a gender effect is not limited to 'familial' schizophrenia. However, other studies⁴⁰ reported differences in the

nature of some symptoms. As such, perhaps studying the gender effect on age and mode of onset is more reliable than studying symptoms, because the former do relate at least to the speed of the underlying pathophysiological mechanisms of schizophrenia, while different symptoms may not be linked with these mechanisms.

In this study, symptoms of schizophrenia were obtained from the OPCRIT checklist, which includes the operational criteria of most diagnostic systems. These operational symptoms are beneficial for diagnosis but not for studying etiological factors of the illness. Using operational criteria consistently to include or exclude various factors, may exclude the etiological factors⁴¹. Moreover, symptoms may change over time in nature and severity within the same patient and non-biological factors may affect these symptoms e.g., socio-cultural determinants. Nonetheless, it can be concluded that the operational criteria are reliable to diagnose schizophrenia in males and females equally.

Table 1: Distribution of presence of family history of schizophrenia by Gender

Family History of Schizophrenia	Male	Female	Total
Positive	52 (70.3%)	23 (67.6%)	75
Negative	22 (29.7%)	11 (32.4%)	33
Total	74	34	108*

4 missing cases

The problem with the term "age of onset" is that it is used for a variety of indices including age of first manifestation, age of first psychiatric consultation, age when patient first met certain criteria for definite diagnosis of schizophrenia, age of onset of psychosis, age at first diagnosis and age at first admission. This issue originates from the main problem which is the lack of a precise pathotype and phenotype of schizophrenia, and this may be the reason why the results of this study are different from other studies. Therefore, caution should be taken with studies that make conclusions about age of onset. Nevertheless, some studies indicate that the first sign of behavioral disturbance occurred at approximately the same age in women and men, but the pre-psychotic prodrome was almost twice as long for women as for men³⁵. Furthermore, based on the 36 studies reviewed by Angermeyer and Kuhl (1988)³⁶, findings of 33 studies showed that the onset of schizophrenia appears earlier in males than in females. However, they concluded that the validity of these studies is reduced by the lack of a precise operational definition for onset of the illness, or the lack of conformation to a modern definition of schizophrenia. Moreover, Jablensky and Cole (1997)³⁸ analyzed data on 778 men

and 653 women from three developing and seven developed countries from the WHO-10-country study of schizophrenia. They found that the observed gender difference in the age of onset of schizophrenia is significantly attenuated when it is "*unfounded from marital status, cultural variation, premorbid personality and family history of psychiatric disorder*". They concluded that gender difference in the age of onset of schizophrenia is not a robust biological characteristic of the disorder.

In this study, the definition of "age of onset" was that of OPCRIT, which is "*the earliest age at which medical advice was sought for psychiatric reasons or at which symptoms began to cause subjective distress or impair functioning*". Although this definition diminishes some subjectivity of other terms for age of onset, it carries some dilemmas. First, seeking psychiatric advice could take place at any period of the illness not necessary at the onset. Second, different strata of the population, e.g., educated versus uneducated, perceive mental symptoms differently and therefore, react with different urgency - with the assumption that the access to psychiatric facilities is the same for everybody. Moreover, the time at which distress or impairment occurs is usually not at the onset of the illness, especially if

sample with no significant difference between males and females.

Familial versus sporadic schizophrenia:

Table 1 shows the distribution of presence of family history of schizophrenia by gender. Seventy-five patients (69.4%) had a positive family history. There was no significant association between gender and the presence of family history of schizophrenia.

Association between gender and symptoms:

No statistical significant associations were found between the gender and presence/absence of features of schizophrenia. Table 2 presents some of the studied symptoms. Other studied symptoms include bizarre behavior, catatonia, excessive activity, reckless activity, distractibility, agitated activity, speech difficult to understand, incoherence, restricted affect, blunted affect, inappropriate affect, rapport difficulty, impairment/incapacity during disorder, deterioration from pre-morbid level of function and psychotic symptoms respond to neuroleptics.

When the two groups (familial and sporadic schizophrenia) were studied separately, it was found (for both groups) that there were no significant gender differences in the age of onset or symptoms of schizophrenia.

Discussion:

The design of this study and in particular the necessity of having living parents, has lead to the inclusion of many young patients. More than 85% of the study sample were 40 years or younger. It is not known if this could cause narrowing of the symptom spectrum of schizophrenia, but since there are few age-specific symptoms in schizophrenia it is unlikely to have a major impact on the results.

The majority of patients with schizophrenia in this study were male. This finding is not unique. Earlier studies carried out in Bahrain also found that schizophrenia was predominant in males^{6, 7, 25, 26}. Similar findings were also observed in other studies carried out in other Arab countries^{20, 27}. Moreover, Wahl and Hunter (1992)²⁸ in their review have reported a consistent predominance of male subjects in schizophrenia research with males outnumbering females two to one.

In accordance with previously conducted research^{17, 29, 30}, this study showed no significant differences between males and females in the age of onset of schizophrenia, yet other studies found otherwise^{16, 31, 32, and 33}.

Interestingly, Shimizu and his colleagues (1988)³⁴ studied 2417 patients with schizophrenia in Japan and found that males were only 0.6 year (on average) younger than female.

A previous study on the symptomatology of schizophrenia in Arab patients has been directed mainly towards specific diagnostic symptoms²⁰. In this study, difference in symptoms between males and females were studied in a sample of schizophrenic Bahraini patients initially selected for a genetic study. Authors are unaware of any previous study on this topic among Arab patients.

Methods

The study involved a sample of 112 Bahraini patients diagnosed with schizophrenia at the psychiatric hospital of Bahrain. The same sample was initially used for enrollment in a genetic study. The sample included all schizophrenic cases registered in the hospital before March 1998 who fulfilled the following criteria:

- 1) Diagnosed as schizophrenia based on ICD-10
- 2) Bahraini citizen
- 3) Age 18 - 60 years
- 4) Parents alive (this criterion was included for the genetic study)
- 5) Have no other co-morbid mental illnesses such as mental retardation or illnesses with mixed affective and psychotic symptoms (this criterion was important for the genetic study).
- 6) Have no coarse brain disease prior to the onset of the disease.

- 7) Have no history of alcohol and/or drug abuse within one year of onset of psychotic symptoms.

OPCRIT 3.31 was applied to all cases as a standardized diagnostic tool^{21, 22, 23, 24}. The ninety items of the OPCRIT questionnaire were obtained from the hospital case notes and analyzed using SPSS 11.5. Relevant summary statistics were calculated. Chi-square test was used to test the association between gender and the symptoms.

Results:

Demographic characteristics:

One hundred and twelve patients were included in the study. 67.9% were male, 78.8% single and 72.3% were unemployed. The mean age was 32.42 ± 7.05 with median at 32 years. The youngest age was 18 and the oldest was 50 years.

Age at onset among males and females:

The youngest age of onset was 14 years and the oldest was 36 years. The mean age of onset of the illness for both genders was 19.97 ± 4.68 (median 19 years). The mean age of onset for males was 20.07 ± 4.40 , while it was 19.77 ± 5.31 for females. There was no significant difference in the age of onset between males and females. The insidious onset of schizophrenia was 50 % of the

research. It is now more obvious that different diagnostic classifications are no more than a common language between scientists¹ and perhaps identifying the correct phenotype of schizophrenia is the most important goal of modern research in schizophrenia².

A review of over 70 prevalence studies of schizophrenia published between 1948 and 1987 identified point prevalence in various population groups ranging from 0.06 percent to 1.7 percent, with lower rates in developing countries³. Another review of 26 prevalence and incidence studies published between 1980 and 2000 revealed significant heterogeneity of prevalence and incidence rates supporting the hypothesis that there is real variation in the distribution of schizophrenia around the world. The review concluded that health planners need to have local data on schizophrenia rates to improve the accuracy of their interventions⁴.

A review of the Mental Health Research in The Arab World does not reveal any study of prevalence of schizophrenia in this part of the world⁵. Nevertheless Abdulkarim and Al-Haddad (1998)⁶, in their study of the incidence of schizophrenia at first admission in Bahrain during the period 1988–1996, found that the average annual incidence rate of schizo-

phrenia was 1.29 per population of 10,000 for all ages and 2.13 per population of 10,000 for ages 15–54 years. Moreover, in a retrospective study of 4217 patients admitted to the Psychiatric Hospital in Bahrain during the years 1983–1987, schizophrenic illness was the most common diagnostic category (31.8%)⁷.

There is no consensus on the gender differences among patients with schizophrenia. On one hand, some studies suggested an interaction between gender and the pathophysiological processes^{8, 9, 10, 11}. Other studies found differences in the brain dopaminergic function¹², cognitive processing^{13, 14} and living skills¹⁵ between males and females with schizophrenia. Moreover, in a comprehensive review of articles on gender differences published between 1966 and 1999, Leung and Chue (2000)¹⁶ concluded that there were significant differences between schizophrenic males and females arising from the interplay of sex hormones, neurodevelopmental and psychosocial sex differences. On the other hand, other studies showed little or no impact of gender on presentation or course of schizophrenia^{17, 18}. Moreover, Walker and Levine (1993)¹⁹ argued that the gender differences found in some studies might be due to sampling bias.

Gender Differences in Symptoms of Schizophrenia

Alsadadi A A, Al-Haddad M K, AlFaraj A M, Qaheri S, Grealley M, Al-Shboul Q M, AlNasheet F

الفروق بين الذكور والإناث في أعراض الفصام

علاء الصندي، محمد الحداد، علي الفرّج، شَبْر القاهري، ماري قريلي، قاسم الشبول و فاضل النشيط

Abstract

Objective: To determine gender differences in the symptoms and age of onset of schizophrenia in Bahraini patients.

Methods: 112 Bahraini patients with schizophrenia who were initially involved in a genetic study were selected. The OPCRIT 3.31 checklist was applied as a diagnostic tool. OPCRIT items were analyzed for differences between males and females.

Results: No differences were found between males and females in the studied symptoms of schizophrenia and age of onset as *"the earliest age at which medical advice was sought for psychiatric reasons or at which symptoms began to cause subjective distress or impair functioning"*. This finding was found in both the familial and sporadic groups of schizophrenia. Furthermore, OPCRIT was found to be an equally reliable tool in diagnosing schizophrenia in males and females.

Conclusion: The above findings were compared and contrasted to the findings of other studies. While there is agreement regarding the lack of gender difference in the prevalence of the studied symptoms of schizophrenia, there is no such consensus regarding the gender difference in the age of onset of schizophrenia. Caution should be taken with studies that make conclusions concerning this issue until a precise operational definition for the onset of the illness is derived.

Key Words: Schizophrenia, Symptoms of Schizophrenia, Age of onset, Mode of onset, Gender difference, OPCRIT

Introduction

Schizophrenia "the cancer of mental illness" is typically a catastrophic illness that begins in adolescence or early adulthood. However, the con-

cept of schizophrenia has changed over the last one hundred years and it is expected to change yet again with conclusive evidence from biological

ببوم تاريخ ميلادهم من الفئات العمرية الأكبر من 35 عاماً وانعدامها بالفئة العمرية "أكبر من 50 عاماً".

الخلاصة: تبين من الدراسة أن تاريخ يوم ميلاد الشخص وفق التقويم الميلادي يلعب دوراً كعامل خطورة في إقدام هذا الشخص على محاولة الإنتحار عند الفئات المؤهلة لذلك خاصة من غير السعوديين، وتبين كذلك أن للتغير الثقافي دوراً في ذلك حيث ارتفعت نسبة من إختار هذا اليوم لتنفيذ محاولة الإنتحار بشكل مثبت إحصائياً خلال عشر السنوات الأخيرة مقارنة مع عشر السنوات التي سبقتها وكان ذلك واضحاً عند غير السعوديين .

الكلمات المرجعية : محاولة الإنتحار، تاريخ الميلاد، الفئات العمرية، طب النفس الاجتماعي ، التغير الثقافي .

***Correspondence:**

Dr Omar Al Modayfer, FRCPC, ABAP Diplomat, MBBS
Head and Consultant, Department of Psychiatry
Director of Family Therapy Program
Assistant Professor, College of Medicine
King Saud Bin Abdulaziz University for Health Science
King Abdulaziz Medical City, National Guard Health Affairs, Riyadh
Prof. Osaima Khair, Consultant, Department of Psychiatry
King Abdulaziz Medical City, National Guard Health Affairs

The person whom correspondence and proofs should be sent to:

Dr. Omar Ibrahim Al Modayfer
Postal address: PO Box 17356, Riyadh 11484, Kingdom of Saudi Arabia.
Tel #. 00966-1-252-0088 ext 17527
Fax #. 00966-1-252-0088 ext 14070
E-mail Address: ModayferO@ngha.med.sa

Table 3
Number of Saudi cases that attempted suicide in the date of birth in the first and the second decades of the study

Decade	Males			Females			Total		
	Number	Total Number	%	Number	Total Number	%	Number	Total Number	%
1984-1993	2	21	9.5	4	45	8.9	6	66	9.1
1994-2003	8	55	14.5	25	199	12.6	33	254	13.0
Total	10	76	13.2	29	244	11.9	39	320	12.2

Table 4
Number of non-Saudi cases that attempted suicide in the date of birth in the first and the second decades of the study

Decade	Males			Females			Total		
	Number	Total Number	%	Number	Total Number	%	Number	Total Number	%
1984-1993	1	6	16.7	0	7	0.0	1	13	7.7
1994-2003	4	8	50.0	13	24	54.2	17	32	53.1
Total	5	14	35.7	13	31	41.9	18	45	40.0

المخلص:

هدف الدراسة: أجريت هذه الدراسة بهدف البحث عن وجود علاقة محتملة بين الشروع بالانتحار وتاريخ يوم الميلاد عند الإناث والذكور السعوديين وغير السعوديين. **طريقة الدراسة:** هذه الدراسة هي جزء من دراسة تحليلية إسترجاعية أجريت على سجلات المرضى بمستشفى الملك فهد للحرس الوطني بالرياض وتناولت جميع حالات محاولات الانتحار التي نومت بالمستشفى خلال الفترة الزمنية الممتدة من 1984/1/1 حتى 2003/12/31م، تم إملاء إستمارة خاصة لكل حالة وأخضعت النتائج التي توصلنا إليها إلى إختبارات الدلالة الإحصائية بإستخدام الطريقة الإحصائية المعروفة باسم (كاي مربع).

نتائج الدراسة: أظهرت نتائج الدراسة أنه من بين مجموع حالات عينة الدراسة البالغة 365 حالة شروع بالانتحار، كان يوم تاريخ الميلاد وفق التقويم الميلادي هو اليوم المختار للقيام بمحاولة الانتحار في 57 حالة بما يعادل نسبة 15.6%. لاحظنا وجود فروق جوهرية جداً وذات دلالة إحصائية بين السعوديين وغير السعوديين بهذا المجال حيث إختار 40% من غير السعوديين هذا اليوم، في حين إختاره 12% من السعوديين فقط. وكان هذا الفرق الجوهري جداً أكثر وضوحاً عند الإناث غير السعوديات (43%) مقارنة مع الإناث السعوديات (حوالي 12%) ولاحظنا إزدياد نسبة الشارعين بالانتحار

- Psychiatry Res. 1998; 81: 219-31.
10. Wellhofer, P.R.: *Selbstmord and Selbstmordversuch*. 1st ed. Stuttgart; Fisher-Verlag, 1981
11. Wasserman, I., Stack, S. Age, Birthday and Suicide, the Journal of Social Psychology, 1994; vol. 134; 493-95.
12. Chuang, H-L, Huang, W-CH. (1996) Age, Birthday and Suicide in Taiwan. The Journal of Social Psychology, 1996; 136: 659-60.

Table 1
Number of cases that attempted suicide in the date of birth in relation to the total number of cases in both sexes

	Males			Females			Total		
	Number	Total Number	%	Number	Total Number	%	Number	Total Number	%
Saudi	10 ⁰	76	13.2	29+	244	11.9	39*	320	12.2
Non-Saudi	5 ⁰⁰	14	35.7	13++	31	41.9	18**	45	40.0
Total	15	90	16.7	42	275	15.3	57	365	15.6

Table 2
Number of cases that attempted suicide in the date of birth in relation to the age groups of cases in both sexes

Age groups (years)	Males			Females			Total		
	Number	Total Number	%	Number	Total Number	%	Number	Total Number	%
≤ 15	0	0	0.0	5	25	20.0	5	25	20.0
16-20	4	22	18.2	14	81	17.3	18	103	17.5
21-25	4	29	13.8	8	81	9.9	12	110	10.9
26-30	1	18	5.6	9	44	20.5	10	62	16.1
31-35	1	8	12.5	3	25	12.0	4	33	12.1
36-40	2	5	40.0	3	14	21.4	5	19	26.3
41-45	2	5	40.0	0	2	0.0	2	7	28.6
46-50	1	2	50.0	0	1	0.0	1	3	33.3
> 50	0	1	0.0	0	2	0.0	0	3	0.0
Total	15	90	17.7	42	275	15.3	57	365	15.6

sults and the current results may be due to several reasons; one of them is that those two studies were carried out on suicide cases while the current study was carried out on suicide attempts. Also, the two studies were carried out on suicide cases ≥ 75 years of age, while only 3 cases in the age group > 50 years were found in the current study.

No other Arabic or local published studies were available to compare with the current results.

Further work will be required to find the predisposing factors and the reasons behind suicide attempts for the aim of suicide prevention.

Recommendation:

An extensive prospective studies including larger number of suicide attempt cases to answer the question: is there relationship between suicide attempts and the DOB? are needed.

References:

1. Siegel, J. A., Saukko P. J., Knupfer G.C.: Encyclopedia of Forensic Sciences, Academic Press California, 2000.
2. Minino, A.M., Arias, E.E. Kochanek, K.D. Murph, BL., 2002: Deaths Final Data for 2000, National Vital Statistics Reports, 50 (15) Hyatts Center for Health Statistics. DHHS Publication (No. PH5) 2002: 1120-2.
3. Shilpa Patel: Self-Injurious Behavior SIB in adolescents an important consideration as a risk factor for suicide. Penn State College of Medicine, March 2003.
4. Center for Disease Control and Prevention (CDC), 2002, Youth Risk Behavior Surveillance – United States, 2001, MMWR Morb Moral Wkly Rep 51 (SS04); 1-64.
5. Barraclough, B & Hughes, J. Suicide: Clinical and Epidemiological Studies, London: 1st ed. Croom Helm, 1987.
6. Al Modayfer, O: Deliberate self harm as a mental health index, study presented in World Psychiatric Congress, September 2005, Cairo Egypt.
7. Khair, O., Al Modayfer, O.: The motive of attempted suicide and the diagnosis of psychiatric disorders of persons who attempted suicide. The Arab Journal of Psychiatry, vol. 16, No. 2, November 2005.
8. Deisenhammer E. A., Kemmler G., Parson P.: Association of Meteorological Factors with Suicide. Acta Psychiat Scand 2003;108: 455-59.
9. Perti A., Miotto P: Seasonality in Suicides, the influence of suicide method, gender and age on suicide distribution in Italy.

Discussion

This report study indicates that 15.6% of suicide attempters in Saudi Arabia select their DOB to attempt suicide. The difference, in this point, between Saudis and non-Saudis was highly significant, where 40% of non-Saudi suicide attempters selected this day to attempt suicide, while only 12% of Saudis did so. This was more obvious in females, where 42% of non-Saudi female suicide attempters selected their DOB to attempt suicide, while only 12% of Saudi females did so. Another finding was the increase in the percentage of DOB suicide attempters among ages above 35 years, while there was none in those above 50 years of age.

Multiple studies referred to the interaction between individual and environmental factors in relation to suicide and suicide attempts such as weather, season, storm and work environment. One of the studies noticed that the risk of attempting suicide increases when there is hot weather and less humidity and in the days following thunder storms⁸. Another study indicated that the relation between certain seasons of the year and the increase of suicide rate is not clear enough⁹. Others noted that additional factors should be put into consideration, such as work position and adaptation of the individual and his relations with other employees¹⁰.

On looking for a logical explanation for the increase of the rate of suicide attempts in the DOB for non-Saudi, no specific reasons can be pointed but the cultural changes and ongoing globalization in the last decade might play a role particularly in the non-Saudi group, as the results revealed a highly significant increase in the percentage of non-Saudi DOB suicide attempters from 7.7% in the first decade of the study to about 53% in the second decade. However, the increase in the percentage of Saudi DOB suicide attempters from about 9% in the first decade to 13% in the second decade was statistically insignificant. This significant increase among non-Saudis may be a result of their cultures, beliefs, habits, being away from homes, their understanding to the date of birth and the unhappy feelings it represent when they are away from their family.

Current results are relatively in agreement with other studies⁸, which demonstrated the positive relationship between the DOB and suicide in those ≥ 75 years of age. However, this contrasts obviously with two other international studies, one carried out in Ohio¹¹ on 3948 suicide cases and the other in Taiwan¹² on 4712 suicide cases. Both studies did not show any statistical relationship between suicide and the DOB in those ≥ 75 years of age. The difference between these re-

The difference was obvious in this point between males and females. The percentage of females ≤ 15 years who selected the DOB was 20%, while no male suicide attempters were found in the same age group.

There was no noticeable gender difference in the age groups 16-20 years and 21-25 years, while it was obvious in the age group 26-30 years (20.5% of the females of this age group selected the DOB while 5.6% of the males of the same age group did).

There were no DOB female suicide attempters in ages above 40 years, while 40% of the males of the age group 41-45 years and 50% of the males of the age group 46-50 years selected the date of birth.

3. The relationship between choosing DOB to attempt suicide and cultural change:

In attempting to study the effect of globalization on the DOB choice as a date of suicide, we grouped the cases into two groups based on the two decades which the study involved; one from the year 1984 - 1993 and the second 1994 - 2003. The number of DOB suicide attempters was determined in each decade and then compared. The percentage in relation to the total number of suicide attempters in each decade was calcu-

lated for both Saudis and non-Saudis.

- 1- For Saudis (table 3):

In the first decade, there were only six male and female Saudi cases of DOB suicide attempters (9.1%), from 66 cases of Saudi suicide attempters. In the second decade, the number of Saudi DOB suicide attempters increased to 33 (13%), from 254 cases. This increase was not statistically significant ($p > 0.05$).

There was an increase in the percentage of Saudi male DOB suicide attempters from 9.5% in the first decade to 14.5% in the second decade. The same was found in Saudi females, where the percentage was only 8.9% in the first decade and increased to 12.6% in the second. This increase was not statistically insignificant ($p > 0.05$).

- 2- For non-Saudis (table 4):

There was a highly significant increase ($p < 0.01$) in the percentage of non-Saudi DOB suicide attempters in the second decade when compared with the first decade. The percentage was only 7.7% in the first decade and 53.1% in the second. This was obvious in both sexes, where the percentage increased in females from 0% to 54.2% and in males from 16.7% to 50%.

- Is there a change in this pattern over the past 20 years?

Materials and Methods

We have reviewed the files of all recorded admissions of suicide attempters at King Fahad National Guard Hospital, KAMC – Riyadh, Kingdom of Saudi Arabia, during a 20-year period (from 1/1/1984 to 31/12/2003). Through the indexed hospital electronic database, all cases classified, according to (ICD-9), as suicide or self-inflicted injuries (E950-E959) were reviewed. All cases of suicide attempts were included, while cases of intentional self-harm for purposes other than death were excluded. Every file contained a photocopy of the medical record including exact date of birth in both Gregorian and Hijri dates according to the original birth certificate. *

We found 365 suicide attempt cases. The medical file of every case was reviewed separately and thoroughly and a special study data form was completed. Nine cases were excluded because they were completed suicide.

The collected data were evaluated statistically (the chi-square test was used). The level of significance was set at $p < 0.05$.

** The accuracy is better in the new generation within the kingdom*

Results

Of the 365 cases of suicide attempts 275 were female and 90 were male.

1. The relationship between the suicide attempt date and DOB (table 1):

The relation between the suicide attempts and DOB according to the Gregorian date was studied in the entire 365 Saudi and non-Saudi males and females. Of them 57 selected their dates of birth to attempt suicide (39 females and 18 males). These represent 15.6% of suicide attempters.

There was a highly significant difference ($p < 0.01$) between Saudis and non-Saudis, where 40% of non-Saudis selected DOB to attempt suicide while only 12.2% of Saudis did. In addition, the difference was highly significant ($p < 0.01$) between Saudi and non-Saudi females: the percentage was 41.9% in non-Saudis and 11.9% in Saudis. Regarding males, 35.7% of non-Saudis selected DOB, while Saudi males showed a percentage of 13.2%; the difference was significant ($p < 0.05$).

2. The relationship between DOB and the age groups of the attempters (table 2):

There was a noticeable increase in the percentage of cases who selected the DOB in the age groups 36-40 years (26.3%), 41-45 years (28.6), and 46-50 years (33.3%). No cases were found in the age group > 50 years.

A suicide attempt is defined as "every act leads to self harm with the intention to die, but does not end with death" ¹. It is considered a medical problem that results in detrimental effects on the individual and the society. International figures show that in the United States approximately 734000 people attempted suicide in the year 2000 (i.e. about 2000 people attempted suicide per day). For the daily 2000 suicide attempts, 80 attempts end up with death² one in 5 adolescents in the United States attempts suicide, in the adults population it reaches 8.5%³. According to the American Center for Disease Control and Prevention⁴, suicide is the third leading cause of death in the age group from 15 to 24 years in the United States. In addition, it is of note that the yearly percentage of suicide attempts in a society is much higher than complete suicides.

Some suicide attempters choose their date of birth (DOB) as the time of attempting suicide, as in some cultures the DOB is an important anniversary for celebration and a symbolic event and achievements in life so a depressed or hopeless individual might have a significant worsening of these feelings which can lead to the suicidal ideation and then attempts. A British study ⁵ indicated that people aged 75 years and above are more susceptible to committing suicide within 30 days

of their birthdays than the younger age groups. This was explained on the basis that birthday, to some elderly, may represent a source of unhappy feelings and encourages their sense of loneliness.

In the Kingdom of Saudi Arabia, suicide and suicide attempts is probably on the rise although reliable statistics are lacking. In one study deliberate, self-harm admitted to a general hospital increased by 10 fold between 1990 and 1999 ⁶. In addition, the rate of suicide admission to general hospitals has increased significantly over 20 years⁷. While in Saudi Arabia (a very conservative society) birthdays have no great significance, but in the age of globalization and shrinking world through cyberspace, satellite TV broadcasting and international culture, birthday significance is changing and becoming more significant. To the Saudi young generations, whether this will impact suicide attempts trend in relation to birthdays or not, that was our challenge in this report.

The aim of the study:

The aim of this study is to answer the following questions:

- Is there a specific pattern in the relationship between date of birth and date of suicide attempts in Saudi Arabia?
- Is there a difference between Saudis and Non-Saudis in this regard?

Is There a Relationship Between Suicide Attempts and the Date of Birth, in Saudi Arabia?

Omar Al Modayfer, Osaima Khair

هل هناك علاقة بين محاولات الإنتحار و تاريخ يوم الميلاد
في المملكة العربية السعودية ؟
عمر ابراهيم المديفر و اوسيمة يوسف خير

Abstract

Objective:

This study tries to answer the question whether there is a relationship between suicide attempts and the date of birth among Saudi and non-Saudi males and females, who were admitted with suicide attempt at King Fahad National Guard Hospital, KAMC-Riyadh, Kingdom of Saudi Arabia.

Method:

This work is a part of a comprehensive retrospective study of all reported suicide attempts based on review of all files admitted to King Fahad National Guard Hospital, KAMC – Riyadh, Kingdom of Saudi Arabia, during the last 20 years (from 1/1/1984 to 31/12/2003) where data was collected in a special study form. Chi-square test was used for analysis.

Results:

A total of 365 cases were identified, 57 (15.6%) attempters chose the date of birth (DOB) for the attempt. Forty percent of non-Saudi compared to 12% of Saudis chose this day ($p < 0.01$). The difference was more noticeable in non-Saudi females (43%) when compared with Saudi females (12%) ($p < 0.01$). The highest age group was between 35 – 50 years.

Conclusion:

This study indicated that the date of birth according to the Gregorian date can be a risk factor to attempt suicide in those susceptible groups especially in non Saudi. A significant increase in the percentage of suicide attempters on the date of birth in the second decade (1994-2003) comparing with the first (decade 1984-1994) in non Saudi might give a hint to the role of globalization and the culture changes.

Keywords: Suicide, suicide attempt, DOB, social psychiatry, cross-cultural psychiatry.

Introduction

Suicide (killing of one's self) is a common social and medical problem in all societies. It has been known since old time and has been the focus of extensive studies in multiple domains.

- Kong. *American Journal of Addiction* 2002; 11(3): 235-46.
14. Kessler R. C. et al.. The twelve-month prevalence and correlates of serious mental illness (SMI), in mental health, United States, ed. RW, 1996.
15. Swadi, H. Methodological problems in adolescent substance abuse research, paper presented at November of the child psychiatry research society, London. *British Journal of addiction* 1987; 83: 935-942.
16. Chambers, CC, Griffey, MS. Use of legal substance within the general population: the sex and age variables. *Addictive Diseases* 1975; 2: 7-19.
17. National Institute on Drug Abuse. NIDA Notes, Volume 17, Number 5 B. NIH Publications No. 03-3478, 2003.
18. Ahmadi, J., Maharlooy, A, N, Alish, AM Substance abuse: prevalence in a sample of nursing students. *Journal of Clinical Nursing* 2004; 13: 60-64

*** Correspondence**

Kamal Abu Qamar, BA sociology, Master in Community Mental Health-UNRWA-Gaza.

*** Abdel Aziz Mousa Thabet**, Assistant Professor of Child and Adolescent Psychiatry, Al Quds University, School of Public Health, Director of Child Health Institute/Gaza. PO Box 5314. Tel 00972 8 2878177, 00972 8 2834292, Email: thabet@phealth.alquds.edu

Panos Vostanis, Professor of Child and Adolescent Psychiatry, University of Leicester, Greenwood Institute of Child Health, Westcotes House, Westcotes Drive, Leicester LE3 0QU, UK. Tel: 0044 116 2252885; Fax: 0044 116 2252881; Email: pv11@le.ac.uk

References:

1. Pickard, M, Bates, L, Dorian, M, Greig, H, Saint, D. Alcohol and drug use in second-year medical students at the University of Leeds. *Medical Education* 2000; 34:148-150.
2. Alphons J.M. Plasschaert, L, Hoogstraten, J, van Emmerik, BJ, Webster, D, Clayton, R. Substance use among Dutch dental students. *Community Dent Oral Epidemiol* 2001; 29:48-54.
3. World Health Organization. Tehran Lipid and Glucose Study. Reported in Strong, K. and Bonita, R. The SURF Report 1. surveillance of risk factors related to non-communicable diseases: current issues of global data. Geneva. 2003.
4. United Nations Office on Drugs and Crime. A rapid situation assessment on patterns and trends in drug abuse in Egypt (RSA). Ministry of Health with support from UNODC, 1999.
5. Tehrani A. BBC Monitoring Middle East- political. London:. ProQuest Information and Learning Company. 2003.
6. Suleiman, RA, Shareef, M, Kharabsheh, S, Abu Danoon, M. Substance use among university college students in Jordan. *The Arab Journal of Psychiatry* 2003; 14: 94-105.
7. Madison-Colmore, O. Substance use among Taiwanese female college students *International Journal for the Advancement of Counselling* 2003; 25: 43-51.
8. Akvardar, Y. Demiral, Y, Ergor, G,. Substance use among medical students and physicians in a medical school in Turkey. *Soc Psychiatry Psychiatry Epidemiology* 2004; 39 : 502 -506.
9. McCabe, SE, Knight, JR, Teter, CJ, Wechsler, H. Non-medical use of prescription stimulants among US college students: prevalence and correlates from a national survey. *Addiction* 2005; 99: 96 -106
10. Palestinian Central Bureau of Statistics, Dissemination and Documentation Department, Division of User Services (2004).
11. Webb, BA, Ashton, CH, Kelly, P, Kamali, F. Alcohol and drug use in UK university students. *Lancet* 1996; 348: 922-925.
12. Li-Yin Chien, M, Anne George, M, A, Armstrong, RW. Country of birth and language spoken at home in relation to illicit substance use. *Canadian Journal of Public Health* 2002; 93: 188-192.
13. Abdullah AS, Fielding, F, Hedley, RA. Patterns of cigarette smoking, alcohol use and other substance use among Chinese University students in Hong

dents would be able to protect themselves from taking or abusing unprescribed drugs and prevention. To consider models of crises management and prevention for all universities' grades as part of the curriculum, so that students learn life skills in how best to deal with life stressors and crisis and acquire professional knowledge and techniques and to launch a systematic anti-drugs awareness campaign in the

Gaza Strip. Replication of the same study should be carried out in a stabilized political period for comparison objectives, in the near future.

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الخلاصة:

هدفت هذه الدراسة الوصفية المسحية التحقق من مدى إنتشار العقاقير غير الموصوفة طبياً وأنماط استخدامها بين الطلاب الجامعيين في قطاع غزة خلال الفترة بين (2002 - 2003). ولقد جمعت البيانات عن طريق إستبيان ذاتي (أسئلة مغلقة) تميز بالسرية وخالي من البيانات الشخصية على العينة العشوائية التي بلغ عدد أفرادها 1363 طالباً وطالبة من المستوى الأول والرابع من كليات الآداب والعلوم، وتراوحت أعمارهم بين (17 - 40 عاماً)؛ 431 طالباً وطالبة من الجامعة الإسلامية (31.6%) - 431 طالباً و طالبة من جامعة الأزهر (31.6%) - 186 طالباً و طالبة من جامعة القدس المفتوحة (13.7%) - 315 طالباً وطالبة من جامعة الأقصى (23.1%).

ولقد أظهرت الدراسة أن 2.1% تعاطوا عقاقير غير موصوفة طبياً (مخدرات) خلال الإثني عشر شهراً الأخيرة، ويمثل المدخنون 11.7% من العينة مع تباين إحصائي ملموس لصالح الذكور 21.4% مقابل الإناث 2.1%، وأن 1.2% تعاطوا الكحول مع تباين إحصائي ملموس لصالح الذكور 2.1% مقابل الإناث 0.2%. نسبة تعاطي المنبهات 0.79%، ونسبة تعاطي المسكنات المنومات 1.09%، ونسبة تعاطي المهدئات 0.3%، ونسبة تعاطي المخدر (الحشيش) 0.99%، ونسبة من يتعاطون العقاقير عن طريق الإستنشاق 0.70%، ونسبة تعاطي عقاقير الهلوسة 0.2%، وقد أشارت الدراسة أن الصيدليات هي المصدر للحصول على العقاقير المنبهة والمسكنة المنومة. وقد أظهرت الدراسة أنه لا يوجد إختلاف جوهري في تعاطي العقاقير الأخرى بين كافة شرائح العينة.

من أبرز نتائج هذه الدراسة التأكيد على مشكلة تعاطي العقاقير غير الموصوفة طبياً بين طلاب الجامعات وبخاصة الدخان في الجامعات، و يمكن تعميم نتائج هذه الدراسة لعدة أسباب مثل كبر حجم العينة وإرتفاع معدل الإستجابة ودقة عملية البحث.

in all races, religions, social classes, and age groups (Hanson and Venturelli, 1986)¹⁹.

For other variables, study revealed significant differences in the following socio-demographic characteristics: (1) male use of tobacco (21.4%) compared with (2.1%) for female and alcohol use by males (2.4%) compared to (0.2%) by females. These results confirmed previous conclusions that substances use is not a male activity only but also practiced by females (Swadi, 1987)¹⁹.

In addition, these findings are consistent with previous literature; women tend to use pills to cope with problems, whereas men tend to use cigarettes and alcohol (Chambers and Griffay, 1975)²⁰.

We attribute the level of tobacco abuse to the prevailing culture in Gaza, which limits the use of alcohol to a high extent and that is not the case with tobacco which is perceived as a "social drug". Our results are much less than in comparison with western communities, in which 51% used alcohol in the past month, followed by cigarettes with 37% in the past month. The researchers concern has referred to the concept that overall alcohol or tobacco use was seven times more likely to start using marijuana than individuals who reported no use of alcohol or tobacco (NIDA, 2003)²¹. The researcher referred these findings, as there is homogeneity be-

tween all localities and similarity in the social classes.

Ahmadi et al (2004)²² in a study of the prevalence of substance abuse in a sample of Iranian nursing students found that 11.8% of the subjects reported use of substances occasionally (at least once a month): cigarette (10.8%), alcohol (3.5%), opium (4.3%), cocaine (0.5%) and hashish (0.3%).

Our low level of abusing alcohol and other drugs even during the years of conflict and war is inconsistent with literature in the West which suggested that people who experienced major trauma and those with PTSD or depression may self-medicate with drugs or alcohol to relax, cope with stress or relieve symptoms (NIDA, 2002)²¹.

Clinical implications and recommendations

In the light of the research findings, the researcher recommends that Ministry of Health, Ministry of High Education and other related Ministries should encourage and support drugs research activities. We have to investigate the same research study on the West Bank's universities in order to have a national database. Recruiting social services units in high educational settings that should be administered by community mental health professionals to address both group and individual issues including management crises, stress and life-skills techniques so that the stu-

estinian Central Bureau of Statistics result in 2000 whose average rate was estimated as 18.6% in Gaza Strip whose age was 12 and above. In addition, psychological and social stress forms a main factor to prompt smoking according to this study and to Palestinian Central Bureau of Statistics (PCBS) ; 16.1% and 18.6% respectively (PCBS, 2004)¹⁴.

Our results are consistent with Webb et al (1996)¹⁵ of a cross-faculty sample study of 3075 second-year university students from ten UK universities which found that 11% of students were non-drinkers. Experience with other illicit drugs were reported by 33% of the sample, most commonly LSD (lysergic acid diethylamide), amphetamines, Ecstasy, and amyl/ butyl nitrate, which had each been used by 13–18% of students. The overwhelming reason given for taking alcohol or drugs was pleasure. In another study of prevalence of illicit substance abuse in Canada (Li-Yin et al, 2002)¹⁶ found that the rate of substance use during the past 12 months was 9.8% for marijuana, 0.9% for LSD, 0.9% for cocaine, 0.2% for amphetamines, and 0.1% for heroin.

This research study revealed that 11.7% of students who experienced smoking during the last year are consistent with PCBS result in 2000 whose average rate was estimated as 18.6% in Gaza Strip whose age

was 12 and above. Also psychological and social stress forms a main factor to prompt smoking in this study and PSCB; 16.1% and 18.6% respectively (PCBS, 2004)¹⁰. Our results are consistent with abusing tobacco and not other substances of Abdullah AS et al (2002)¹⁷ study of substance abuse among 1,197 Chinese undergraduates in Hong Kong. Students reported their current and past use of tobacco (13%), alcohol (61%), marijuana (2%), and other illicit drugs (0.4%).

The rate of substance use was higher among males, residents of university hall, senior students and among those who possessed a positive attitude towards substance use. From global perspective, prevalence rate in Gaza Strip is very close to the prevalence rate in Cyprus and Romania, which varies from 1-2 %, but significantly less than Chile with 17.0 % (Kessler et. al, 1996)¹⁸ and Czech Republic, France, Ireland and United Kingdom with 35 % with “cannabis” as the most commonly used illicit drug (UN, 2001)⁸. Regionally, however, prevalence rate in Egypt was 5.2 % for those aged 15 and above with “Hashish” as most illicit drug used (UN, 2001)⁸.

This indicates that all communities with different cultures are vulnerable to prevalence of substance abuse and seems as an “equal opportunity” affliction which is found

smoke cigar, and the least substance abused was pipe 0.9%.

Marital status and substance abuse

One hundred and five single students 11.74% abusing tobacco. It was noticed also that married students were the least one abusing substance. There is statistically significant difference in abusing tobacco, alcohol, hypnotics, cannabis for widows and inhalants for divorced.

Tobacco abuse and place of residence

Fifty five students (10.4%) abused tobacco lived in a city, 37 students (11.9%) lived in a camp, 16 students (14.2%) lived in a village, and 10 students (17.8%) lived in a housing project. With regard to other substances, it was noticed that majority of abusers lived in a city and a camp respectively. There was no statistically significant difference between different residential localities.

Size of family and substance abuse

Two students 0.93% of family size more than 17 persons abusing Hallucinogenic. There is a statistically significant difference in abusing Hallucinogenic ($\chi^2 = 7.38$, $df = 2$, $p = 0.05$). However, it was noticed that the students whose family size 11 persons and above are more likely abusing substance (for example, 28 students with 13% abused

tobacco, 4 students with 1.8% abused alcohol), followed by those from 6-10 persons (68 students with 12.3% abused tobacco and 5 students with 0.91% abused alcohol. There is statistically significant difference in abusing Hallucinogenic for students who came from a family size of 11 or more.

Reasons for abusing substances

With regard to reasons for taking substances, male students abused substances more than females in the following causes: overcoming psychological stress (20.3%) compared to (9.7%) for female, for curiosity (10.9%) compared to (7.3%) for female, for sex desire (6.2%) compared to (0%) for female. On the other hand, female students abused substances more than male for: treating physical problems (43.9%) compared to (39%) for male, removing feeling of weakness (12.2%) compared to (9.3%) for male, overcoming academic challenges (7.3%) compared to (0%) for male, treating psychological disorder (7.3%) compared to (4.6%) for male. However, both genders were mostly similar in the cause of social acceptance (4.6% male) and (4.8% female).

Discussion

This study showed that 17 % of students have ever used substance over the past twelve months. This research study revealed that 11.7% who experienced smoking during the last year is consistent with Pal-

tistical test for categorical variables. The researcher determined P value to be (<0.05) with 95% confidence interval. Chi-square is the most relevant statistical test for differences significance between frequency of abused substances such as tobacco among universities and socioeconomic factors such sex, marital status, and type of university.

Results

Sociodemographic characteristics of the study sample

The results showed that 1007 students responded according to the instructions given out of 1047 received from the students, of which 40 questionnaires (respondents) were not considered due to over exaggeration or spurious answering. 308 students (30.58%) out of 431 students from Islamic University, 298 students (29.60%) out of 431 students from Al-Azhar University, 284 students (28.20%) out of 315 students from Al-Aqsa University and 117 students (11.62%) out of 186 students from Al-Aqsa Open University.

Four hundred and seven male students were from the first grade (40.4%), and 91 from the fourth grade (9.04%), while 401 female students were from the first grade (39.82%) and 108 were from the fourth grade (10.72%). Students' mean age was 20.4 years ($SD=2.9$), 67.2% of students were between 17-20 years-old, 24.7% of them

between 21-23 years-old, 4.07% aged 24-26 years, and 3.97% of them were 27 years.

Three hundred and ten students (30.78%) live in camps, 529 students (52.5%) live in cities, 112 students (11.12%) live in villages, and 56 students (5.56%) live in housing projects. The sample was drawn from computerized-registry lists of students by college and grade of study.

Prevalence of substance abuse

This study showed that 17 % of students have ever used substance over the past twelve months. Graph 1 shows the prevalence of different substances.

Sex differences in abusing substance

This study showed that 17% of students have ever used substance over the past twelve months. However, there was no statistically significant difference between male and female students in using other substances.

Tobacco use in various universities

One hundred and eighteen students of the universities (11.7%) abused tobacco. There was a statistically significant difference between universities' students abusing tobacco toward Al-Azhar university ($\chi^2=16.24$, $df=3$, $p=0.05$).

Pattern of tobacco abuse

With regard to pattern of substance, 71.6% smoke cigarettes, 23% smoke hubble-bubble, and 4.4%

by college and grade and a table of random technique was used to randomly select the sample. The drawn sample selection was occurred as follows: (1) Universities colleges were stratified according to the specialty (Art colleges and Science colleges), (2) within each of the specialty strata, a random selection of students was chosen with probability proportional. (3) Within each selected university college, subjects were randomly selected for subsequent analysis to make various comparisons in terms of sex, grade and specialty. From 1363 students, a total of 1007 students responded to the interview with response rate of 76.8%. Three hundred and eight students (29.4%) from Islamic University, 298 students (28.4%) from Al-Azhar University, 284 students (27.1 %) from Al-Aqsa University, and 117 students (11.11%) from Al-Aqsa Open University.

Materials and procedures

The questionnaire of closed-end questions was designed to collect related information about substance abuse and patterns through self-administered questionnaire. A panel of nine experts in the field of psychiatry and research assessed the tool and gave some guidance which led to slight amendment of some questions.

We obtained all necessary ethical approvals to conduct the study from Helsinki Committee in the Gaza

Strip (Official ethical committee for research) and a letter of approval was obtained from the administration of each university. Confidentiality and anonymity was maintained, all the time, to protect students' identities by not showing personal data including name, address, telephone number, student number, and putting the questionnaire in a blank white envelop as well as collecting the questionnaires on the spot. In addition, an explanatory letter from the researcher was given to all participants and the administrators confirmed verbally the confidentiality.

The result indicated that the correlation was from (0.57-0.86) is significant at the 0.01 level (2-tailed) and the reliability coefficient with Alpha scale, reached 0.79. Moreover, a reliability analysis, using scale split shows that correlation between forms was 0.58 and equal-length spearman-Brown was 0.73. The study started in April through end of June 2003.

Statistical analysis

We used the Statistical Package for Social Sciences (SPSS) program for data entry (SPSS ver10). The variables were coded numerically, and then advance statistical analysis was done including descriptive and inferential statistics and frequency tables of all variables. Statistical differences between variables were assessed using Chi square (χ^2 sta-

and association with other risk factors.

Madison-Colmore (2003)⁷ in a study of use of alcohol and other drugs among 193 Taiwanese female college students currently attending Taiwan Women's College of Arts indicated that alcohol and tobacco were the most commonly used substances. Compared to a similar study, alcohol use in the last year was considerably higher among the participants in this study and tobacco use was considerably lower. During the past 30 days, the use of both alcohol and tobacco were relatively low.

Akvardar et al (2004)⁸ study of Dokuz Eylül University Medical School in Turkey found that alcohol was the most frequently used substance. Lifetime smoking prevalence was as high as 50 %. Benzodiazepines (Alprazolam and, diazepam) were the most frequently used sedative-hypnotics. The use of illicit substances was rare; cannabis being the most commonly used illicit substance.

McCabe et al (2005)⁹ in a study of one hundred and nineteen nationally representative 4-year college students in the United States found that the life-time prevalence of non-medical prescription stimulant use was 6.9%, past year prevalence was 4.1% and past month prevalence was 2.1%. Past year rates of non-medical use ranged from zero to 25% at individual colleges. Non-

medical prescription stimulant users were more likely to report use of alcohol, cigarettes, marijuana, ecstasy and cocaine.

The aim of the study was to investigate the prevalence of substances abused among university students and relationships with other sociodemographic factors in the Gaza Strip.

Methods Participants

As the sample population is quite large (22,706 students of both sexes from 1st & 4th year students) and based on statistical view, the sample consisted of 1363 university students (6 %) of the total number of the first and fourth grade of the university students from both sexes (455 female and 908 male) by stratified sampling. The reasons for selecting these two university grades (1st and 4th) were to have a sufficient number of students for statistical analysis (this is the same reason for stratifying the sample into two specialty categories only: Art colleges and Science colleges) and the students of the first year have already got the experience of the university for a full year as the application of the study was conducted in the last two months of the scholastic year. The four universities and their branches participated in the study; the sample represented 6% of the total number of the first and fourth university grade of the selected students. Then, computerized-registry lists of students were obtained from the four universities

abusing drugs. Pickard et al (2005)¹ in a study about alcohol and illicit drug use in 136 second-year medical students at the University of Leeds found that 86% of the students drank alcohol. Illicit drug use was reported by 33.1% of students (28.3% of males, 35.6% of females).

In another study of Alphons et al (2001)² to assess the prevalence of substance use among Dutch dental students found that alcohol was the students' drug of choice for lifetime (95%), past year (94%), and past month (88%) use. No significant correlations were found between alcohol use and sex, type of schools and years in dental education. In the past month, 58% of students reported drinking on 5 or more days, 53% had 5 or more drinks on the same occasion, 20% had 5 or more drinks on the same occasion on 5 or more days, and 17% reported getting drunk at least monthly. Prevalence rates for past month use of tobacco was 24% and marijuana was 4%.

Tobacco consumption is one of the greatest public health threats in the 21st century. WHO estimates that there are 4.9 million tobacco-attributable deaths each year, which is about 7% of all deaths? The number of deaths is rising fast, especially in developing countries where the number of tobacco users has been increasing. Tobacco addiction starts early in life. World

wise, every day 80,000 to 100,000 youth become regular smokers (WHO, 2003)³.

In Egypt, it was reported in the late 1990s that annual prevalence was estimated at 5.2 percent for those aged 15 and above who abused drugs (UN, 2001)⁴. Hashish is the most illicit drug used in Egypt. The reliable source from the State Welfare Organization in Iran warned against the prevalence of the ecstasy abuse and polydrug consumption in Iran as well as there are two million drug users and 1.2 million addicts in Iran (Tehrani, 2003)⁵.

In a cross-sectional study conducted in Jordan in 2001 indicated that there is likely to be a drug dependence problem in the near future. A large-scale survey on 5064 university and community college Jordanian students aged between 18-25, showed that 2.5% of the sample abused cannabis, 3.3% abused sedatives, 0.9% abused opiates, 2.8% abused Benzhexol, 2.6% abused stimulants, 12% abused alcohol and 29% abused tobacco. Substance abuse was significantly higher in male students. Regarding the risk factors in abusing substance, seeking acceptance, encouragement by friends and poor communication with family were the most common risk factors (Suleiman et al, 2003)⁶. The aim of this study was to investigate the prevalence of substance abuse among the university students

Substance use among University Students in the Gaza Strip

Abu Qamar, Kamal ; Thabet, A. A; Vostanis, Panos

إستعمال المواد بين طلاب الجامعات في قطاع غزة

كمال أبو قمر، عبد العزيز ثابت وبنانوس فوستانيس

Abstract

Aim: The aim of the study was to investigate the prevalence of substance abuse among university students in the Gaza Strip.

Design: A cross-sectional study

Settings: Four universities in the Gaza Strip (Al Azhar, Islamic, Open Alquds, and Al Aqsa University).

Participants: A total number of 1047 university students in the 1st and 4th year of study of Art and Science colleges, aged 17-40 years, in 2003.

Measurements: Participants completed an anonymous self-report questionnaire of two parts; the first part of 13 questions relating to socio-economic information, health status and abusing unprescribed substances, sources and reasons of abusing and the second part of 5 questions for 8 substance categories.

Results: Results showed that 2.1% have ever used unprescribed substances over the past twelve months; 11.7% abused tobacco (smokers) with significant differences for male (21.4%) compared to (2.1%) for female, 1.2% abused alcohol with significant differences for male (2.1%) compared to (0.2%) for female. The study revealed no significant differences of other substances; 0.79% abused psycho-stimulants, 1.09% abused sedatives, 0.30% abused opiates, 0.99% abused cannabis, 0.70% abused inhalants, and 0.20% abused hallucinogenic. Pharmacies were the most common source of narcotics and stimulants.

Conclusion: Our low level of abusing alcohol and other drugs even during the years of conflict and war is inconsistent with literatures in the West, which suggested that people who experienced major trauma and those with post traumatic stress disorder or depression may self-medicate with drugs or alcohol to relax, cope with stress or relieve symptoms.

Key words: Prevalence, substance abused, university students, Gaza Strip.

Introduction

Substance abuse dates back thousands of years. The use and abuse of illicit drugs today are more

prevalent and widespread throughout the world than ever before. University students are at risk of

الملخص:

الهدف: هدفت هذه الدراسة إلى وصف نموذج للتويم المرضى البالغين 18 عاماً فما دون في الأجنحة النفسية من حيث تحديد الأمراض النفسية المشخصة ، الأمراض العضوية المصاحبة ، انخفاض الذكاء ، مدة التويم ، التحويل للتخصصات الأخرى ، وكذلك طريقة الخروج من المستشفى.

الطريقة: مراجعة ملفات المرضى حول المعلومات أعلاه بالنسبة للدخول الأول لهم في الأجنحة النفسية بمستشفى الملك خالد الجامعي شهر مايو 1995 وحتى أبريل 2005.

النتائج: تم تنويم 140 مريض ممن بلغوا 18 عاماً فما دون ، يمثلون 4,5% كافة الحالات المنومة. مثل المراهقين 95%. في حين مثلت الإناث 75%. حوالي 65% دخلوا عبر قسم الطوارئ. معظم المرضى بقوا في المستشفى أقل من شهرين. حوالي 30% شخصت حالاتهم اضطراب وجداني ثنائي القطب ، أما 27% فشخصوا فصام. لم تشكل الإصابات العضوية نسباً ذات أهمية. كما أن درجة انخفاض الذكاء المصاحب بلغت 9,3%. معظم حالات التحويل وجهت للإخصائين النفسيين. سبعة مرضى (5%) تلقوا جلسات علاج كهربائية. حوالي 10,7% كان لديهم تاريخ محاولات إنتحارية. حوالي 19,3% تم حجزهم في غرفة مفردة لضبطهم على الأقل مرة واحدة خلال فترة التويم. معظم حالات الخروج 72,9% قررت من قبل الطبيب المعالج.

الختامة: إن معظم الحالات المنومة كانت لمراهقين لديهم سلوك عنيف وقد شخصت حالاتهم اضطراب وجداني ثنائي القطب أو فصام. كما تبين أن هناك شح في الاستفادة من خدمات التويم بالنسبة للأطفال.

مفتاح الكلمات: طفل ، مراهق ، طب نفسي.

Correspondence:

Dr. Fatima Al-Haidar

Associate Professor and Child & Adolescent Consultant Psychiatrist

Department of Psychiatry # 55

King Khalid University Hospital

P.O. Box 7805, Riyadh 11472

King of Saudi Arabia

Tel: 966-1-467-1717

Fax: 966-1-467-2571

Email: alhaidar4@hotmail.com

Pattern of Child and Adolescents

Table 3: Psychiatric Disorders

Diagnosis	N	(%)
No diagnosis	8	(5.7)
Bipolar affective disorder	42	(30.0)
Schizophrenia	38	(27.1)
Adjustment disorder	13	(9.3)
Brief Psychotic disorder	10	(7.1)
Conversion disorder	5	(3.6)
Anorexia Nervosa	4	(2.9)
Major depressive disorder	3	(2.1)
Obsessive compulsive disorder	3	(2.1)
Borderline personality disorder	3	(2.1)
Child abuse	3	(2.1)
Other diagnoses	8	(5.7)
Total	140	(100.0)

Table 4: Referral to other specialties

Specialty	N	(%)
Psychology	47	(46.1)
Neurology	16	(15.7)
Sociology	7	(6.9)
Dental Clinic	7	(6.9)
Endocrinology	5	(4.9)
Dermatology	5	(4.9)
Other Specialties	15	(14.7)
Total	102	(100.0)

Table 5: The use of seclusion

Data	Indication			Total raw N (%)
	Physical Ag- gression	Sexual Dis- inhibition	Difficult Management	
Associated Psychiatric dis- order:				
Schizophrenia	9	0	1	10 (37.0)
BAD – manic episode	5	1	1	7 (25.9)
BAD – depressive episode	1	0	1	2 (7.4)
Personality disorder	0	2	0	2 (7.4)
Other diagnoses	5	1	0	6 (22.2)
Total	20	4	3	27 (100)
Planning:				
Yes	6	4	0	10 (37.0)
No	14	0	3	17 (63.0)
Total	20	4	3	27 (100.0)
Ordered by:				
Psychiatrist	20	4	3	27 (100.0)
Psychologist	0	0	0	0 (0.0)
Total	20	4	3	27 (100.0)
Total Column N (%)	20 (74.1)	4 (14.8)	3 (11.1)	27 (100.0)

- out procedure in a child psychiatry inpatient milieu: Combining dynamic and behavioral approaches. *Child Psychiatry and Human Development* 1990; 20: 205-216.
12. McGuffin PW. The effect of time-out duration on frequency of aggression in hospitalized children with conduct disorder. *Behavioral Residential Treatment* 1991; 6: 279-288.
13. Millstein KH, & Cotton NS. Predictors of the use of seclusion on an inpatient child psychiatric unit. *JAACAP* 1990; 29: 256-264.

Table 1: Socio-demographic Data

Data	N	(%)
Age (years): Children (0-12)	7	(5.0)
Adolescents (>12-18)	133	(95.0)
Total	140	(100.0)
Gender: Female	105	(75.0)
Male	35	(25.0)
Total	140	(100.0)
Education: Illiterate	15	(10.7)
Preschool	1	(0.7)
Elementary	28	(20.0)
Secondary	40	(28.6)
High School	56	(40.0)
Total	140	(100.0)

Table 2: Admission Data

Data	Detailed Data	N	(%)
Source of admission	Emergency room	91	(65.0)
	Psychiatric OPD	26	(18.6)
	Other wards	7	(5.0)
	Other hospitals	16	(11.4)
	Total	140	(100.0)
Place of admission	Female Psychiatric ward	107	(76.4)
	Male Psychiatric ward	33	(23.6)
	Total	140	(100.0)
Duration of Admission	< one week	23	(16.4)
	One week – one month	65	(46.4)
	> one month – 2 months	37	(26.4)
	> 2 months	15	(10.7)
	Total	140	(100.0)
Number of Admission	Once	121	(86.4)
	Twice	13	(9.3)
	≥ three times	6	(4.3)
	Total	140	(100.0)

first study to shed light on children and adolescent admission into psychiatric wards in Saudi Arabia.

Recommendation:

A prospective study that compares the outpatient, day care and inpatient psychiatric services to dis-

cover the real needs of children and adolescents needs to be undertaken.

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References:

1. Simon Gowers, Andrew Cotgrove. The future of inpatient child and adolescent mental health services. *BJP* 2003; 183: 479-480.
2. Simon Gowers, Judith Clarke, Marcia Alldis et al. In-patient admission of adolescents with mental disorder. *Clinical Child Psychology and Psychiatry* 2001; 6: 537-544.
3. Richard Corrigan, Bryn Mitchell. Service innovations: rethinking in-patient provision for adolescents. *Psychiatric Bulletin* 2002; 26: 388-392.
4. Anne O'Herlihy, Adrian Worral, Paul Lelliott et al. Distribution and characteristics of inpatient child and adolescent mental health services in England and Wales. *BJP* 2003; 183: 547-552.
5. SR AlBalla, EA Bomgboye, SR AlBalla, M Al-Sekeit and R. Al-Rashed. Pattern of adult admission into medical wards of King Khalid University Hospital, Riyadh (1986-1990). *Saudi medical Journal* 1993; 14: 225-229.
6. American Psychiatric Association. *Diagnostic Statistical Manual of Mental Disorders*, 4th edition (DSM IV) Washington DC; American Psychiatric Association 1994.
7. Duthie, P. In-patient adolescent services (letter). *Psychiatric Bulletin* 2001; 25:360.
8. Steve Baldwin, Yvonne Jones. Is electro-convulsive therapy unsuitable for children and adolescents? *Adolescence*, Fall 1998; 33: 645-55.
9. Milling L, Campbell NB, Bush E, & Laughlin A. The relationship of suicidality and psychiatric diagnosis in hospitalized pre-adolescent children. *Child Psychiatry and Human Development* 1992; 23: 41-49.
10. Milling L, Gyure K, Davenport CW, & Blair P. Suicidal behavior among psychiatric outpatient children: An estimate of prevalence. *Child Psychiatry and Human Development* 1991; 21: 283-289.
11. Kennedy P, Kupst MJ, Westman G, Zaar G, Pines R. & Schulam JL. Use of the time-

vices and caregivers great anxiety through their disturbed behavior²⁴. However, reviewing the case notes of patients attending accidents and emergency, extra patients were in need of admission due to Parent-Child Relational Problem or Relational Problem NOS, and families refused admission so cases were dealt with through outpatient crisis intervention. Most of the youngsters with mental retardation and associated psychiatric or behavioral problems are admitted to special institutes for the mentally retarded rather than to psychiatric units.

As might be expected, most of admitted children and adolescents were referred to psychologists either to do psychometric assessment or to conduct behavioral modification. Social workers were involved for family assessment and counseling while neurologists and endocrinologists were involved to exclude associated neurological and endocrinal disorders. Dermatologists were consulted for dermatological side-effects of psychiatric drugs.

ECT as a treatment option for adults has a long history. ECT for children and adolescents has not been widely used and no empirical studies or controlled evaluation has been conducted⁸. Legal and ethical considerations e.g. informed consent and indications for use of ECT in this survey were similar to those confirmed in other studies⁸.

Among children hospitalized on a psychiatric in-patient unit, a high rate (18% to 80%) with suicidal behavior ranging from suicidal ideation to actual attempts has been found^{9,10}.

On inpatient unit, seclusion frequently is used in response to inappropriate behavior. It has been demonstrated to decrease the rate of a child's negative behavior^{11,12}. Indications of seclusion in this survey were similar to those reported in other studies¹³. Most patients were discharged upon the decision of the treating psychiatrists or during out-on-pass which usually will not be allowed unless there is good level of improvement. Those who discharge their children against medical advice do so either because they are not happy about the improvement or they are looking for alternatives which can include other psychiatrists or even folk medicine healers or because they are not happy to keep their children in a place prepared for adults, not children.

Conclusion: Most admitted patients were adolescents with aggressive behavior and diagnoses of bipolar affective disorder or schizophrenia, with low utilization of the service by children.

Limitation:

The main limitation of this study is that it is a retrospective study with a small sample of children. However, the positive part is that this is the

rest have other diagnoses with insignificant percentage.

Table 5 shows information about use of seclusion. Seclusion in this paper means keeping the patient in a safe and well-constructed room in the ward for a specific period of time, averaging half an hour. Twenty-seven patients (19.3%) were secluded at least once during admission. Physical aggression was reported to be the most common indication for seclusion. Schizophrenia was reported to be the most frequently associated psychiatric diagnosis. Seclusion was used when needed rather than on previously planned program. All instances of seclusion were ordered by treating psychiatrists.

Finally, most of patients' discharges (72.9%) were arranged by the treating team while 15.7% were discharged against medical advice and 11.4% were sent for out-on-pass and failed to return.

Discussion:

Child and adolescent psychiatry is a newly developing specialty in the Kingdom of Saudi Arabia (KSA). Although there are few outpatient departments directing their service specifically to people younger than 18 years of age, no single inpatient unit is specialized for children and adolescents.

In comparison to KSA, the situation in U.K. is quite different. A survey done in 1999 shows the presence of 80 units of child and adolescent

psychiatry across England and Wales providing 900 - bed capacity⁴. However, compatible with other studies, admitting children and adolescents with psychiatric disorders into adult units is not unusual^{3,7}.

The main explanation for the low percentage of admission is the absence of inpatient psychiatric unit for children and adolescents in KKAU. Therefore, many patients are treated as outpatients though they are in need of admission.

The number of admitted females outnumbered males in this survey, while other studies showed equality². The male ward is an acute one for cases with violence, drug abuse, manic with increased libido and personality disorders, so it is a real risk to admit youngsters there. Therefore, many families refuse such admission.

The regulation of the psychiatric department at KKAU that might facilitate young female admission is the allowance of the mothers to be admitted with them which is not the case of the male ward. Similar to other studies, most of admissions were via emergency department as they are considered to be urgent. The length of stay was comparable to other studies².

Psychiatric diagnoses that indicate admission are mostly schizophrenia and affective disorder, and these findings are comparable to other studies where patients cause ser-

- Only first admission to the psychiatric wards of KKHU for people 18 years of age or younger from May 01 1995 to April 20 2005 were retrieved from the admission log book of the psychiatric wards and their case notes were reviewed.
- The psychiatric diagnoses were according to the Diagnostic Statistical Manual (DSM-III R or DSM-IV).
- Assessment of intelligence was according to Wechsler Intelligence Scale for Children (WISC).
- Data were expressed as mean \pm standard error of mean.

Results:

In the ten years covered by this survey, 3105 patients were admitted to the psychiatric wards. 2090 (67.3%) were admitted to female ward and 1015 (32.7%) were admitted to male ward. One hundred and forty (4.5%) were younger than 18 years of age.

Table 1, shows the socio-demographic data of the 140 youngsters. Mostly they were adolescents, 95%. Females outnumber males. Forty percent were attending high school followed by those attending secondary school, 28.6%

Sixty-five percent were admitted via emergency department followed by psychiatric outpatient clinics, 18.6%, and the rest were referred from other wards of KKHU or from other hospitals (Table 2).

The female psychiatric ward received 76.4% of admission. Most

patients were admitted for between one week and less than 2 months. Most patients were admitted only once. Table 3 shows psychiatric diagnoses. The most notable diagnoses were bipolar affective disorder, 30% and schizophrenia, 27.1%.

About 89.3% shows no associated medical illness, 2.9% have iron deficiency anemia, 2.1% have hypothyroidism and 5.7% were having different medical diagnoses with insignificant prevalence. Only 9.3% of the sample has mental retardation. Seventy-seven percent of them are mildly mentally retarded, 16.7% have moderate mental retardation and 8.3% are severely mentally retarded.

Table 4 shows referrals to other specialties. Out of 140, 85 patients (60.7%) received 102 referrals. Psychologists received 46.1% of referrals followed by neurologists, 15.7%.

Seven patients (5%) received electro-convulsive therapy (ECT). Of those who had ECT, fifty-seven percent were diagnosed to have schizophrenia followed by bipolar affective disorder – manic episode, bipolar affective disorder – depressive episode and major depressive disorder forming 14.3% each.

Fifteen patients (10.7%) reported history of suicidal attempt prior to admission. Forty percent of them have major depressive disorder, 20% have adjustment disorder, 13.3% have schizophrenia and the

specialized service, ideally requiring planning at a national level ².

Whilst all developed countries report high rates of adolescent mental disorders, in recent years there has been a decline in adolescent inpatient provision, for example, in the United Kingdom (U.K.)³. A report shows that only 0.3% of adolescent requiring psychiatric admissions in the North-West of England were admitted to adolescent psychiatric unit, the rest being treated in adult mental health or non-psychiatric facilities³.

Some reports identified serious weakness in inpatient services for adolescents, fragmentation, un-planning and inadequacy of emergency provision ^{2,4}.

Little is known about the current state of provision of inpatient units in many countries ⁴.

Up to my personal knowledge and searching published local papers, I could not find a reference for a single specialized psychiatric inpatient unit for children or adolescents in Saudi Arabia at present.

Therefore, the main objective of the present survey is to describe the pattern of admission into the psychiatric wards of King Khalid University hospital (KKUH) for patients aged 18 years and younger, identifying the psychiatric diagnoses, associated medical problems and mental sub-normality, the median length of stay in the hospital and pattern of discharge.

Materials and Method:

- KKUH, which opened in 1982, is the main teaching hospital for the college of Medicine of King Saud University (KSU). It has a 640 - bed capacity with a 24 hour accident emergency coverage⁵. In addition to almost all specialties, KKUH has two acute psychiatric wards. One is for females with a 12- bed capacity and another 11-bed capacity ward for males. There is no special unit for children and adolescents who are psychologically disturbed. Children 12 years old and younger are admitted to the female ward and adolescents >12 to 18 years old are admitted to the gender appropriate ward.

- The criteria for admission include: the patient being harmful to himself or others, difficulty to contain the patient at home, to finalize the diagnosis or to initiate the treatment.

- A form was designed to abstract information from the case records. It consists of two parts. The first part includes patients' demographic data and the second part includes admission data.

- A formal request was filled to take permission from the treating psychiatrists and the department of psychiatry to get access to the case records.

- A specialized child psychiatrist carefully reviewed the case notes of the patients between May and September 2005.

Pattern of Child and Adolescent Admission into Psychiatric Wards

Fatima Al-Haidar

نموذج لتتويج الأطفال والمراهقين في الأجنحة النفسية
فاطمة الحيدر

Abstract:

Aims:

To describe the pattern of admission into psychiatric wards for patients aged 18 years and younger, identifying their psychiatric disorders, associated medical problems and mental sub-normality, the length of stay in the hospital, referrals and pattern of discharge.

Methods:

First admission of people 18 years of age or younger to the psychiatric wards of King Khalid University Hospital in Riyadh, Kingdom of Saudi Arabia, from May 1st, 1995 to April 30th, 2005 were reviewed regarding admission data.

Results:

A total of 140 patients (4.5% of all admission) were 18 years of age or younger. Adolescents constitute 95%, females form 75%. Sixty-five percent were admitted via emergency department. Most of them stayed less than 2 months. Bipolar affective disorder was diagnosed in 30% and schizophrenia was diagnosed in 27%. Physical diseases were not significantly associated. Only 9.3% had associated mental retardation.

Most of referrals were directed to the psychologists. Seven patients (5%) received electro-convulsive therapy (ECT). About 10.7% reported history of suicide attempt. About 19.3% were secluded at least once during admission. Most discharges, 72.9%, were decided by the treating psychiatrists.

Conclusion:

Most of admitted patients were adolescents with aggressive behavior and diagnosed as bipolar affective disorder or schizophrenia, with low utilization of the service by children.

Key words: *child, adolescent, psychiatry.*

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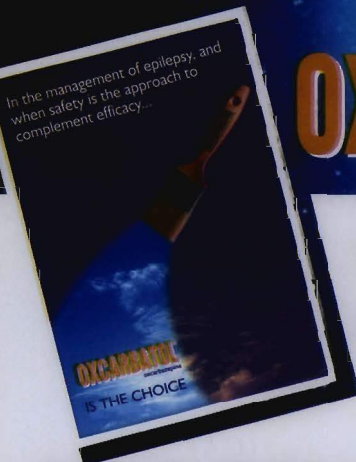
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References:

1) Epilepsia, 1995; 36 supp. 2. 2) Epilepsy - Res. 1996 Nov; 25 (3): 299-319. 3) Clin - Pharmacokinet. 1996 Oct; 31 (4): 309-24. 4) Pharmacol Res. 1995 Mar - Apr; 31 (314): 155-62.

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1. Zeigler FJ, Imboden, JB, Meyer E. Contemporary conversion reactions: a clinical study. *Am. J. Psychiatry* 1960; 116:901-10.
2. Mosey AC. Occupational therapy. Configuration of a profession. New York: Raven Press, 1981.
3. Gotesman KG. Behavioural aspects of physical illness.* In: Ohman R, Freeman H, Holmkvist AF, Nielzen S, editors. Interaction between mental and physical illness. Needed areas for research. Berlin: Springer Verlag, 1989: 120-34.

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1. Biederman J, Kagan J, et al. J Am Acad Child Adolesc Psychiatry. 2005; 44 (7): 775 - 784. 2. Biederman J, et al. Atomoxetine Increases Extracellular Levels of Norepinephrine and Dopamine in Prefrontal Cortex of Rat: A Potential Mechanism for Efficacy in ADHD. Neuropsychopharmacology. 2005; 30 (5): 859 - 71. 3. Strattera (atomoxetine) Product Characteristics. Lilly & Company, Inc. 4. Olanoff JL. Atomoxetine treatment for children with ADHD, including an assessment of evening and morning dosing. J Child Nerv Dis. 2004; 19(10): 1000-1008. 5. American Academy of Child & Adolescent Psychiatry. Guidelines for managing pediatric bipolar disorder. J Child Psychol Psychiatry. 2004; 45(1): 1-10. International Guidelines Center, www.myguidelinescenter.com.

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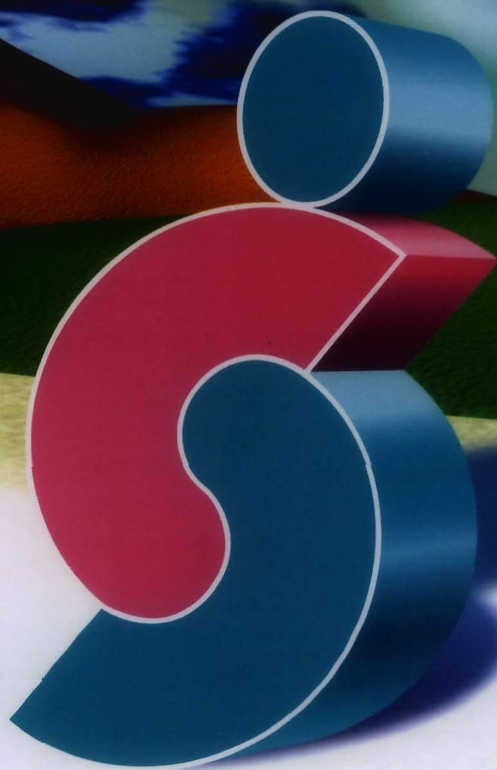
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