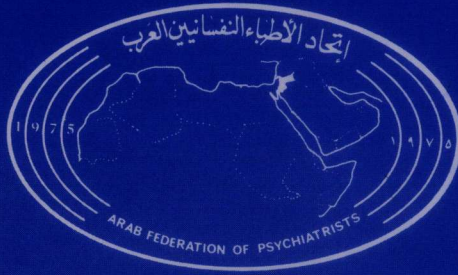


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# المجلة العربية للطب النفسي

THE ARAB JOURNAL OF PSYCHIATRY



المجلد السابع، العدد الثاني، تشرين ثاني (نوفمبر) ١٩٩٦  
Volume 7, No. 2, November 1996

تصدر عن

اتحاد الأطباء النفسيين العرب

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The Arab Federation of Psychiatrists

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# المؤتمر العربي السابع للطب النفسي

## VII<sup>th</sup> INTERNATIONAL PAN-ARAB CONGRESS OF PSYCHIATRY

اتحاد الاطباء النفسيين العرب

The Arab Federation of Psychiatrists



**"MENTAL HEALTH-STATE OF THE ART"**

لبنان في ١٢-١٥ تشرين الثاني ١٩٩٦

November 12<sup>th</sup>-15<sup>th</sup> 1996  
KASLIK - LEBANON

تنظيم : الجمعية اللبنانية للطب النفسي

Organized by: The Lebanese Psychiatric Association

# المجلة العربية للطب النفسي

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عدنان يحيى التكريتي

نائب رئيس التحرير

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البحرين

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## Psychological Stressors for Parents of Visual-Impairment Children: A Case Study for A Jordanian Clan

Adnan Omar Atoum

الضغوط النفسية لأسر المعاقين بصرياً: دراسة حالة لعشيرة أردنية

عدنان العتوم

### المخلص

هدفت الدراسة الحالية الى الكشف عن مصادر وحجم الضغوط النفسية التي تعاني منها أسر المعاقين بصرياً في إحدى العشائر الأردنية التي تنتشر بها ظاهرة الإعاقة البصرية، ومدى اختلاف هذه الضغوط باختلاف عدد من المتغيرات الديمغرافية للمعينة.

ولقد أشارت النتائج أن من أكثر مصادر الضغوط النفسية التي تعاني منها أسر المعاقين بصرياً العناية الطويلة بالمعاق خلال فترة الحياة والافتقار الى المكافأة الشخصية. كما أشارت النتائج الى ارتفاع في حجم الضغوط النفسية لدى الأباء والأمهات الأميين، ولدى أمهات المعاقين بصرياً مقارنة مع ابائهم.

### ABSTRACT

The present study aimed at identifying the sources of stressors for (19) parents of the visually-impaired children and (20) parents of normal children in a local clan that has a high percentage of blinds.

Results showed that the largest sources of stressors came from caring for the blind for a long periods of time and lack of personal reinforcement as a result of such caring.

### مقدمة

تواجه أسر الأفراد الذين يعانون من الإعاقات خلال محاولات الأسرة التكيف والتعايش مع بأشكالها المختلفة الكثير من الضغوط النفسية المعاق (١)٠ ولعل هذا حال أسر الأفراد المصابين

والمواصلات لأبنائهم، والتمتع بالإجازات والرحلات للأسرة (٧) .  
وفي دراسة أجراها الحديدي، والصمادي، والخطيب، على (١٩٢) أسرة أردنية، أشارت نتائجها الى أن اسر الأطفال المعاقين بشكل عام قد تميزوا بدرجات عالية من الضغوط النفسية مقارنة مع اسر الأطفال العاديين . أما دراسة اللوزي وأحمد (٨) فقد هدفت الى الكشف عن الضغوطات النفسية والاجتماعية والجسدية التي يتعرض لها قطاع آخر من الفئات الخاصة وهم مرضى الكبد في الاردن . وقد أظهرت هذه الدراسة أن أعلى مصادر الضغوط جاءت من المصادر النفسية الناتجة عن الاعتماد الكلي على الأطباء وإحساس المرضى بعدم القدرة على التحكم بمجرى حياتهم يليها الضغوط الجسدية الاجتماعية .

### مشكلة الدراسة وأهميتها

يشكل وجود إحدى الإعاقات داخل الأسرة عائقاً كبيراً من النواحي الاجتماعية والنفسية والاقتصادية، وتصبح المشكلة أقوى إذا ما كانت على مستوى العشيرة والأقارب لتصبح هاجساً يؤرق كل فرد من هذه العشيرة لما لذلك من

بالإعاقات البصرية خاصة إذا ما عرفنا بان عدد المعاقين بصرياً في الأردن يقدر بحوالي (٤٠٠٠) حالة منهم (١٤٠٠) حالة دون سن ١٨ سنة (٢) .

وتشير العديد من الدراسات الى أن ارتفاع معدلات الطلاق والأزمات الزوجية، وانتشار الانتحار، وزيادة العدوانية، والصعوبات المادية، والعزلة عن الناس، وزيادة الاكتئاب والشعور بالذنب والقلق والتوتر هي من أبرز مظاهر الضغوط النفسية التي تواجهها اسر المعاقين بصرياً فتتمثل بالانسحاب من مواقف التفاعل الاجتماعي، والاكتئاب، والشك والتردد (٤) .

ومع أن الدراسات الأجنبية أو العربية والمحلية التي أجريت في موضوع الضغوط النفسية والاجتماعية لأسر المعاقين بصرياً تعتبر محدودة العدد، إلا أن هذه الدراسات قد أظهرت مستويات عالية من الضغوط النفسية لأسر المعاقين بصرياً مقارنة مع اسر الأطفال العاديين (٥)(٦) . كما أكدت بعض الدراسات على حجم المعاناة التي تواجهها اسر المعاقين بصرياً من خلال توفير مستوى جيد من التعليم والصحة



عن الأسر التي لا تعاني من الإعاقات

البصرية في نفس مجتمع الدراسة؟

٣. هل تختلف مستويات الضغوط النفسية التي

تعاني منها اسر الأفراد المعاقين بصرياً

باختلاف جنس الوالدين، درجة الإعاقة

البصرية، عدد أفراد الأسرة، عدد المعاقين

بصرياً في الأسرة، الدخل الشهري للأسرة،

المستوى التعليمي للأب والأم، درجة القرابة

بين الأباء والأمهات، درجة الإعاقة

البصرية، وعدد غرف السكن؟

### محددات الدراسة

تعتبر نتائج هذه الدراسة محددة بمجتمع الدراسة

وعينتها ولا يمكن تعميم هذه النتائج إلا على

المجتمعات المشابهة.

### الطريقة والإجراءات

مجتمع الدراسة وعينتها:

تكونت العشيرة التي تم دراستها من خمسة

أفخاذ (فروع) تواجدت الإعاقات البصرية في

اثنيتين منها فقط، حيث بلغ عدد الأسر في هذين

الفخذين حوالي (٣٠) أسرة منها (١١) أسرة

تواجدت فيها إعاقات بصرية اعتماداً على دراسة

مسحية للعشيرة بالتعاون مع أفراد من العشيرة

تبعات اجتماعية وزيادة في حجم الضغوط النفسية

الواقعة على هذه الأسر أو العشيرة ككل. ولعل

هذه الحالة تنطبق على إحدى العشائر الأردنية

في منطقة غور الأردن والتي تعاني من مشكلة

الإعاقات البصرية بين فخذين (فرعين) من هذه

العشيرة. وعليه، فإن أهمية الدراسة تنبثق من

أهدافها والتي تتجلى في الكشف عن مصادر

ودرجة الضغوط النفسية التي تعاني منها اسر

المعاقين بصرياً في مجتمع الدراسة ومعرفة التباين

في مستويات الضغوط النفسية حسب تباين عدد

من الخصائص الديمغرافية لهذه الأسر واطهار

نوع من التفهم لحجم الضغوطات النفسية لهذه

الشريحة من المجتمع وطرق معالجتها.

### أسئلة الدراسة

لقد عملت الدراسة الحالية على إجابة الأسئلة

التالية:

١. ما هي مستويات ومصادر الضغوط النفسية

التي تتعرض لها اسر المعاقين بصرياً في

مجتمع الدراسة؟

٢. هل تختلف مستويات الضغوط النفسية التي

تعاني منها اسر الأفراد المعاقين بصرياً عنها

## الضغوط النفسية لأسر المعاقين بصرياً

٣. عدد أفراد الأسرة بما في ذلك الكفيف والأب والأم

٤. عدد الأفراد المكفوفين في الأسرة

٥. عدد غرف السكن

٦. الدخل الشهري للأسرة بالدينار

٧. درجة القرابة بين الزوجين: عالية (أولاد

العم أو الخال) ودرجة منخفضة (أخرى)

درجة الإعاقة: عالية (وقدرت ٥٠٪ أو أعلى)

ومنخفضة (وقدرت بأقل من ٥٠٪) حسب

السجلات الطبية للكفيف

### أداة الدراسة

تكونت أداة الدراسة من جزئين وهما:

أولاً: معلومات عامة شملت عدداً من المتغيرات

الديمغرافية عن المعاق بصرياً وأسرته (المتغيرات

المستقلة).

ثانياً: مقياس الضغوط النفسية: لقد تم استخدام

مقياس هلويد للضغوط النفسية الناجمة عن

الإعاقة ومقومات التعايش معها (Holroyd)

Stress and Resources Questionnaire) والذي

قام بتعريبه على البيئة الأردنية الحديدي

والصمادي والخطيب (٣)٠ وهو يتمتع بدرجات

مقبولة من صدق المحكمين، ودرجات عالية من

المعنية ومديرية التنمية الاجتماعية في تلك المنطقة.

تكونت عينة الدراسة من جميع أفراد مجتمع

الدراسة الذين تعاني أسرهم من الإعاقات

البصرية والتي تكونت من (١٩) فرداً منهم (٨

آباء و١١ أم) يمثلون (١١) أسرة تعاني من

الإعاقات البصرية. وقد تم أخذ عينة مماثلة من

حيث المستويات الاجتماعية والاقتصادية

والثقافية من نفس العشيرة والقرية ومن غير

المصابين بالإعاقات البصرية تكونت من ٢٠ فرداً

منهم (١٠ آباء، ١٠ أمهات) لأغراض المقارنات

وللإجابة على السؤال الثاني، وبذلك يصبح

حجم العينة الكلية (٣٩) فرداً.

متغيرات الدراسة:

المتغير التابع:

١. الدرجات التي يحصل عليها الآباء والأمهات

من أسر المعاقين بصرياً في مجتمع الدراسة

على مقياس الضغوط النفسية.

المتغيرات المستقلة:

١. الجنس (الأب - الأم)

٢. مستوى تعليم الأب والأم (أمي أم لا)

المؤسسية بالكيفي، وتعد النتائج التي تم التوصل لها في الإجابة على السؤال الرابع مؤشراً على الصدق التمييزي للأداة كما هو موضح في الجدول رقم (١) ثبات الأداة:

لحساب ثبات الاختبار، تم استخراج معامل الاتساق الداخلي باستخدام معادلة كرونباخ الفا للعينة على المقياس الكلي بصورته المختصرة وبلغ (٠,٨٢) حيث تعتبر هذه القيمة مؤشر جيد على ثبات الاداة.

### النتائج

فيما يلي عرض للنتائج التي أظهرتها الدراسة بعد إجراء التحليلات الإحصائية المناسبة للإجابة على أسئلة الدراسة.

أولاً: للإجابة على السؤال الأول من أسئلة الدراسة "ما هي مستويات ومصادر الضغوط النفسية التي تتعرض لها اسر المعاقين بصرياً" تم استخراج المتوسط الحسابي والانحراف المعياري لمقياس الضغوط النفسية كما هي مبينة في الجدول رقم (١).

الثبات عن طريق إعادة التطبيق بلغت (٠,٨٢)، والاتساق الداخلي من خلال معادلة كرونباخ الفا وبلغت (٠,٨٨) وقد اختصر الباحث المقياس من (٦٦) فقرة تمثل (١١) بعداً الى (٢١) فقرة تمثل (٧) أبعاد وذلك لان عدد الفقرات كبير جداً ولا يتناسب مع المستوى التعليمي لمجتمع الدراسة الحالية.

### صدق الأداة:

عرض الباحث الاختبار بصورته العربية على (١٠) من المختصين في علم النفس والإرشاد النفسي بهدف الاختصار والتأكد من مناسبة الفقرات والأبعاد وإمكانية اختصار الفقرات الى أقل حد ممكن حيث تم الأخذ بآراء المحكمين حينما اتفق (٨٠٪) منهم على الأقل حول تعديل أو اختصار فقرة من فقرات المقياس، وعليه، وصل المقياس الى صورته النهائية والمكونة من (٢١) فقرة موزعة بالتساوي على (٧) سبعة مصادر مختلفة من مصادر الضغوط النفسية وهي: اعتمادية الكيفي على نفسه، الإعاقة المعرفية، القيود على النشاطات العائلية، العناية خلال فترة الحياة، التفكك العائلي، الافتقار الى المكافأة الشخصية خلال العناية بالكيفي، العناية

الضغوط النفسية لأسر المعاقين بصرياً

الجدول رقم (١)

المتوسطات الحسابية والانحرافات المعيارية لقياس الضغوط النفسية وأبعاده المختلفة لأسر المعاقين وغير المعاقين بصرياً\*\*

البعد (مصدر الضغط)	نوع الأسرة	المتوسط الحسابي	الانحراف المعياري	عدد العينة	قيمة ت
الاعتمادية	مصابة	١٥٠	١٣٧٧	١٩	٠٢٨٩
	غير مصابة	٠٤٠	٠٧٥	٢٠	
الإعاقة المعرفية	مصابة	١٨٧	٠٨٩	١٩	١٢٠
	غير مصابة	١٤٥	١٢٣	٢٠	
القيود على النشاطات العائلية	مصابة	١٣١	١٠١	١٩	٠١٩٥
	غير مصابة	٠٧٠	٠٨٦	٢٠	
العناية خلال فترة الحياة	مصابة	٢٦٩	٠٨٧	١٩	٠٥٨٨
	غير مصابة	٠٩٥	٠٨٩	٢٠	
التفكك العائلي	مصابة	١٣٧	١٠٢	١٩	٠٤٣٢
	غير مصابة	٠٢٠	٠٤١	٢٠	
الافتقار الى المكافأة الشخصية	مصابة	٢٢٥	٠٧٧	١٩	٠٢٤٤
	غير مصابة	١٥٥	٠٩٤	٢٠	
العناية المؤسسية	مصابة	١٨١	٠٨٣	١٩	٠٢١٨
	غير مصابة	١١٥	٠٩٩	٢٠	
الدرجة الكلية على المقياس	مصابة	١٢٨١	٤١٥	١٩	٠٥٠٤
	غير مصابة	٦٤٠	٣٢٨	٢٠	

\* دالة إحصائياً عند مستوى (@ . ٠٠٥)

\*\* مدى العلامات للمقياس الكلي تراوح ما بين صفر الى ٢١ درجة وللأبعاد الفرعية من صفر الى ٣ درجات

على المقياس الكلي وجميع مستويات الضغوط النفسية للأبعاد ما عدا الإعاقة المعرفية . وقد بلغ المتوسط الحسابي لأسر المعاقين بصرياً (١٢ر٨١) وللأسر السليمة (٦ر٤٠) .

ثالثاً: للإجابة على السؤال الثالث من أسئلة الدراسة "هل تختلف مستويات الضغوط النفسية التي تعاني منها اسر الأفراد المعوقين بصرياً باختلاف جنس الوالدين، درجة الإعاقة البصرية، عدد أفراد الأسرة، عدد المعاقين بصرياً في الأسرة، الدخل الشهري للأسرة، المستوى التعليمي للأب والأم، درجة القرابة بين الأباء والأمهات، درجة الإعاقة البصرية، وعدد غرف السكن"، تم استخدام اختبار -ت لمعرفة الفروق في درجات الأباء والأمهات على مقياس الضغوط النفسية حسب تباين مستويات المتغيرات الديمغرافية الواردة في السؤال الثالث، كما هو موضح في الجدول رقم (٢) .

يتضح من الجدول رقم (١) أن أكثر مصادر الضغوط النفسية لأمهات وأباء المعاقين بصرياً هي العناية خلال فترة الحياة (٢ر٦٩) والافتقار الى المكافأة الشخصية (٢ر٢٥) والإعاقة المعرفية (١ر٨٧) والعناية المؤسسية (١ر٨١) . أما أقل الضغوط النفسية لهذه الأسر فقد جاءت على القيود على النشاطات العائلية (١ر٣١) والتفكك العائلي (١ر٣٧) والاعتمادية (١ر٥٠) .

ثانياً: للإجابة على السؤال الثاني من أسئلة الدراسة "هل تختلف مستويات الضغوط النفسية التي تعاني منها اسر الأفراد المعاقين بصرياً عن الأسر التي لا تعاني من الإعاقات البصرية في مجتمع الدراسة"، تم استخدام اختبار -ت لمعرفة الفروق بين مستويات مجموعتي عينة الدراسة . الجدول رقم (١) يوضح أن هنالك فروق ذات دلالة إحصائية في حجم الضغوط النفسية بين الأسر التي تعاني من الإعاقات البصرية والتي لا تعاني من الاعاقات البصرية

الضغوط النفسية لأسر المعاقين بصرياً

الجدول رقم (٢)

نتائج اختبار -ت في الفروق بين درجات مقياس الضغوط النفسية حسب تباين عدد من المتغيرات

الديمغرافية\*\*

المتغير	مستويات المتغير	المتوسط الحسابي	الانحراف المعياري	عدد العينة	قيمة ت
جنس الوالدين	الأباء	٨٤٠	٢٥١	٨	٠٤٤٤
	الأمهات	١٤٨٢	٣٠٣	١١	
عدد أفراد العائلة	أقل من ٥	١٣٢٩	٢٤٣	٨	٠٦١
	أكثر من ٤	١٢٤٤	٣١٣	١١	
عدد المعاقين بصرياً	أقل من ٣	١٢٤٤	٣٠٥	١١	٠٦٠
	أكثر من ٢	١٣٢٨	٢٥٦	٨	
الدخل الشهري بالدينار	أقل من ١٥٠	١٣١١	٣١٠	١١	٠٤٩
	أكثر من ١٤٩	١٢٤٣	٢٥١	٨	
تعليم الأب والأم	غير أمي	١١٨٠	٣٩١	٧	٠٢٠٨
	أمي	١٣٩٣	٢٣٢	١٢	
القربان بين الأب والأم	قربان عالية	١٢٩٢	٢٩٨	١٥	٠٤٠
	قربان منخفضة	١٢٣٣	٢٠٨	٤	
درجة الإعاقة البصرية	عالية	١٢٨٩	٢٣٧	١١	٠١٢
	منخفضة	١٢٧١	٤٤٥	٨	
عدد غرف السكن	أقل من ٥	١٤١٧	٢٣٢	١٢	١٦٧
	أكثر من ٤	١٢٠٠	٢٨٢	٧	

\* دالة إحصائياً عند مستوى (٠.٠٥ . @)

\*\* مدى العلامات للمقياس الكلي تراوح ما بين صفر الى ٢١ درجة ولأبعاد الفرعية من صفر الى ٣

درجات

بالكفيف لا تعزز حاجات أعضاء الأسرة الشخصية كالثواب والسعادة والشعور بالأهمية، ثم بعد الإعاقة المعرفية (١٨٧) لضعف المستويات التعليمية للمعاق، وبعد قلة العناية المؤسسية (١٨١)، وبعد الضغوط الناتجة عن اعتمادية الكفيف على الأسرة (١٥٠)، وبعد التفكك العائلي الذي يسببه وجود الكفيف (١٣٧)، وأخيراً بعد القيود على النشاطات العائلية (١٣١) .

وللوقوف على مدى الضغوط النفسية التي تعاني منها أسر المعاقين بصرياً، عملت الدراسة الى مقارنة حجم الضغوط النفسية بين أسر المعاقين بصرياً ومجموعة من الأسر التي لا يتواجد بها إعاقات بصرية من نفس مجتمع الدراسة . لقد أكدت هذه النتائج أن هنالك فروق ذات دلالة إحصائية بين المجموعتين على المقياس الكلي، حيث بلغ حجم الضغوط النفسية لأسر المعاقين بصرياً (١٢٨١) وللأسر السليمة (غير المعاقين بصرياً) حوالي (٦٤٠) .

وتوضح النتيجة التي تم التوصل إليها في مقارنة حجم الضغوط النفسية بين أسر المعاقين وغير المعاقين بصرياً بشكل لا مجال فيه للشك أن

يتضح من الجدول رقم (٢) أنه لا يوجد فروق ذات دلالة إحصائية بين مستويات الضغوط النفسية تعزى للمتغيرات الديمغرافية السالفة الذكر باستثناء جنس الوالدين حيث كان حجم الضغوط للأبَاء (٨٤٠) أقل منها للأمهات (١٤٨٢)، والمستوى التعليمي للأب والأم حيث كانت نسبة الضغوط النفسية للاميين (١٣٩٣) وهي أعلى منها لغير الأميين والتي بلغت (١١٨٠) . أما التحليل المتعلق بالفروق في حجم الضغوط حسب درجة القرابة فانه لا يعد دقيقاً نظراً لأن عدد الأفراد الذين كانت درجة قرابتهم منخفضة أربعة فقط، وذلك يعود لطبيعة العينة .

### مناقشة النتائج

لقد أكدت نتائج الدراسة وجود مستويات عالية من الضغوط النفسية التي تتعرض لها أسر الأفراد المعاقين بصرياً (١٢٨١) مقارنة مع أسر غير المصابين بالإعاقة البصرية (٦٤٠) . ويتضح أن أكثر مصادر الضغوط النفسية قد كانت في بعد العناية مدى الحياة (٢٦٩) وذلك لان الكفيف يتطلب رعاية خاصة لا تنتهي عند حد أو عمر معين، يليه في ذلك بعد الافتقار الى المكافأة الشخصية (٢٢٥) حيث يؤكد ذلك أن العناية

## الضغوط النفسية لأسر المعاقين بصرياً

ظاهرة عامة في مجتمع الدراسة، حيث أظهرت النتائج أن حجم الضغوط النفسية لم يتغير بتغيير عدد من المتغيرات الديمغرافية كتباين عدد أفراد الأسرة، وتباين عدد المعاقين بصرياً في الأسرة، وتباين الدخل الشهري للأسرة، وتباين درجة القرابة بين الأبناء والأمهات، وتباين درجة الإعاقة البصرية، وتباين عدد غرف السكن للأسرة. أما بالنسبة للفروق في حجم الضغوط النفسية بين الأبناء (٨٤٠) والأمهات (١٤٨٢) فهذا تأكيد على أن الأمهات يتحملن أعباء نفسية عالية للعناية بالطفل المعاق أكثر من الأب الذي غالباً ما يعمل خارج البيت وتبقى الأم لوحدها مع الكفيف لتتحمل أعباء الاهتمام به والتفكير بمستقبله. كذلك فإن النتائج أظهرت أن الأبناء والأمهات الأميين (١٣٩٣) يتعرضون إلى درجات أعلى من الضغوط النفسية من غير الأميين (١١٨٠)، وهذا تأكيد على أن الجهل والأمية تسلب الأسرة الكثير من فرص التعلم والتكيف السليم مع تغيرات الحياة وتؤكد على أهمية التعلم لمواجهة الضغوطات الناتجة عن الإعاقات بأشكالها.

أمهات وأباء المعاقين بصرياً يتحملون أعباء نفسية واجتماعية عالية مقارنة مع أقرانهم من نفس المستويات الاجتماعية والاقتصادية في نفس العشيرة. كذلك أن مقارنة حجم الضغوط النفسية بين المجموعتين حسب مصادر الضغوط النفسية الستة أشارت إلى وجود فروق ذات دلالة إحصائية في جميع المصادر ما عدا الإعاقة المعرفية للأبناء. فقد أكدت هذه النتائج أن أمهات وأباء المعاقين بصرياً يعانون من ضغوط نفسية أعلى من الأسر السليمة في أبعاد الاعتمادية على الذات، والقيود على النشاطات العائلية، والعناية الطويلة خلال فترة الحياة، وزيادة التفكك الأسري، والافتقار إلى المكافأة الشخصية من خلال العناية بالأبناء، والعناية المؤسسية للأبناء. هذا ومع أنه لم يكن هنالك فروق ذات دلالة إحصائية بين الطرفين في بعد الإعاقة المعرفية للأبناء إلا أن المتوسط الحسابي لحجم الضغوط النفسية الناتجة عن هذا البعد كانت أعلى في أسر المعاقين بصرياً منها في الأسر السليمة. لقد أكدت النتائج السابقة أن ارتفاع حجم الضغوط النفسية لدى أسر المعاقين بصرياً كان



أولاً: توفير الخدمات النفسية والاجتماعية اللازمة لأسر المعاقين بصرياً، لتساعدهم على التكيف والتعايش مع أبنائهم المعاقين بصرياً، وخصوصاً الأمهات لتحملهم القسم الأكبر من الضغوط النفسية.

ثانياً: تقديم العون والمساعدات المالية لأسر المعاقين بصرياً للتخفيف من الأعباء المادية للعناية بالكفيف لان أحد مصادر الضغوط النفسية هي المشاكل الاقتصادية خلال العناية بالكفيف.

ثالثاً: مساعدة اسر المعاقين بصرياً في التخطيط لمستقبل الكفيف وتأهيله ليكون معتمداً على نفسه ما أمكن وكون ذلك يخفف من الضغوط الناتجة عن مخاوف العناية بالكفيف مدى الحياة والخوف على الكفيف بعد موت الوالدين.

رابعاً: نظراً لارتفاع نسبة الأميين بين أبناء وأمهات اسر المعاقين بصرياً (حوالي ٤٠٪)، فان تلك الفئات بحاجة ماسة الى الانخراط في برامج تعليم الكبار ومحو الأمية لتساعد هؤلاء الأفراد في التكيف السليم مع ظروف المعيشة والتعامل بعقلانية مع المعاقين بصرياً.

إن النتائج السابقة الذكر تؤكد على أن ارتفاع حجم الضغوط النفسية التي تعاني منها اسر المعاقين بصرياً في مجتمع الدراسة والمجتمعات المشابهة لهي مؤشر واضح الى حجم المعاناة التي تلحق المكفوفين وأسرههم خلال محاولتهم التكيف مع ظروف الحياة وخصوصاً أن مجتمع الدراسة يتميز أصلاً بمستويات اجتماعية واقتصادية متدنية. إن نتائج هذه الدراسة تتفق مع العديد من الدراسات النفسية التي تؤكد على أن اسر الأفراد الذين يعانون من حالات الإعاقة بأشكالها المختلفة يعانون من الكثير من الضغوط النفسية والتوترات خلال محاولات الأسرة التكيف والتعايش مع المعاق (٥)(٧). كذلك فان نتائجها تتفق مع نتائج دراسة الحديدي، والصمادي، والخطيب (٣) وهي الدراسة الأردنية الوحيدة في مجال الضغوطات على المعاقين بشكل عام.

### التوصيات

يعتقد الباحث أن هنالك عدد من التوصيات لا بد للجهات المعنية التي تتعامل مع هذا النوع من المشاكل أو المجتمعات من أخذها بعين الاعتبار ومنها:

المراجع

presented at the Annual meeting of the Mid-South Educational Research Association, Louisville, Kentucky.

Tsang, S.m., Tsang, S., Chan, E., & .6

Lee, C. (1992). Stress of parents with normal and special pre-school children. Bulletin of Hong Kong Psychological Society, 28/29, 63-79.

White, B. (1990). Stress in families .7 with visual impairment OSERS News, Washington, DC.

.8 . اللوزي، محمد وأحمد، تيسير (1994) . التعرف

على الضغوط النفسية والاجتماعية لدى مرضى

غسيل الكلى . المجلة العربية للطب النفسي،

المجلد الخامس، العدد الأول، 12-22 .

1. الخطيب، جمال والحديدي، منى والسرطاوي، عبد

العزیز (1992) . إرشاد اسر الأطفال ذوي الحاجات

الخاصة . دار حنين، عمان، الاردن .

2. الخطيب، عبدالله (1992) . الفئات الخاصة من

الاطفال . ورقة عمل مقدمه الى المؤتمر الوطني

للطفولة، عمان، الاردن .

3. الحديدي، منى والصادي، جميل والخطيب،

جمال (1994) . الضغوط النفسية التي تتعرض لها

اسر الأطفال المعوقين . دراسات، المجلد 21 (أ)،

العدد الأول، 7-34 .

Tuttle, D. (1986). Family members . 4 responding to a visual impairment. -Education-of-the-visually--handi capped, 18(3), 107-16.

Hobber, D. (1991). Visual . 5 impairment and family life. Paper

الدكتور عدنان العتوم

استاذ مشارك

رئيس قسم علم النفس التربوي

جامعة اليرموك

اريد - عمان

- with spinal cord injury” Archives of physical medicine and rehabilitation Vol. 62, P. 432-438.
29. Richmond T S. 1990 “Spinal cord injury” Nursing clinics in North America Vol. 25, No. 1, P. 57-70.
30. Oliver M. Zarb G. Silver J. Moore M. Salisbury. 1988 Walking into darkness Macmillan Press.

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Amman - Jordan

## Spinal Cord Injury

- management approaches eds. Buchanan and Nawoczenski. Williams and Wilkins.
12. Vargo F A. Stewin L. 1984 "Spousal adaptation to disability: ramifications and implications for counseling" *International journal for the advancement of counseling* Vol. 7, P. 253-260.
  13. Stanton G M. 1984 "A needs assessment of significant others following the patient's spinal cord injury, *Journal of neurosurgical nursing* Vol. 16 No. 5, P. 253-256.
  14. Lawson N C. 1978 "Significant events in the rehabilitation process: the spinal cord patient's point of view" *Archives of physical medicine and rehabilitation* Vol. 59, P. 573-579.
  15. DeVivo M J. Fine P R. 1985 "Spinal cord injury" its short term impact on marital status" *Archives of physical medicine and rehabilitation* Vol. 66, P. 501-504.
  16. Johheim K A. 1983 "Psychological aspects of spinal cord injuries-an important point in the outcome of rehabilitation" *Annals Academy of medicine Singapore* Vol. 12, No. 3, P. 377-379.
  17. Bracken M B. Shepard M J. 1980 "Coping and adaptation following acute spinal cord injury: a theoretical analysis" *Paraplegia* Vol. 18 P. 74-85.
  18. Tucker S J. 1990 "The psychology of spinal cord injury: patient-staff interaction" *Rehabilitation Literature* Vol. 41, No. 5-6, P. 114-121, 160.
  19. Bray G P 1978 "Rehabilitation of spinal cord injured: a family approach" *Journal of applied rehabilitation counseling* Vol. 9, No. 3, P. 70-78.
  20. Burnham L. Werner G. 1978 "The high level tetraplegic" Vol. 16, P. 184-192.
  21. Stewart W. 2nd edition 1985 *Counseling in rehabilitation* Croom Helm pub.
  22. Bartol G. 1978 "Psychological needs of the spinal cord injured person" *Journal of neurosurgical nursing* Vol. 10, No. 4, P. 171-175.
  23. Richmond T S. Craig M. 1985 "Family centered care for the neurotrauma patient" *Nursing clinics of North America* Vol. 21, No. 4, P. 641-651.
  24. Butt L. 1989 "Psychological aspects of discharge" in the management of high quadriplegia whiteneck et al Demons Pub.
  25. Killen J M. 1990 "Role stabilisation in families after spinal cord injury" *Rehabilitation Nursing* Vol. 15, No. 1, P. 19-21.
  26. Crewe N M. Krause J S. 1988 "Marital relationships and spinal cord injury" *Archives of physical medicine and rehabilitation* Vol. 69, P. 435-438.
  27. Gardner B P. Theocleous F. Watt J W H. Krishnan K R. 1985 "Ventilation or dignified death for patients with high tetraplegia" *British Medical Journal* Vol. 291, P., 1620-1622.
  28. Buck F M. Hohmann G W. 1981 "Personality, behaviour, values and family relations of children of fathers

they felt excluded from many of the tasks carried out by nursing staff on the wards when after discharge, they are the ones expected to carry out such tasks alone and unsupported. They also felt excluded from choice about whether the injured person should return to the family or not; it was simply assumed by all the professionals<sup>(2)</sup> concerned that the person should be returned to the family, even when the person had not been living in the family home, prior to the accident<sup>(29)</sup>. Richmond<sup>(3)</sup> and Craig<sup>(23)</sup> reinforces that the views of the family must be considered. Their

perception of events is influenced by the meaning which is attached to the injury, sociocultural values and required life-style adjustments. She therefore proposes that a full and continuing assessment be made of the structure and function of the family in order to identify needs and provide the appropriate support. It is proposed that by including the family in the programme of care, in decision making and in provision of support that the potential for full and positive adjustment can be realised for both family and patient. In this manner, fulfilling integration can be achieved.

## References

1. Bray G P. 1987 "Family adaptation to chronic illness" in rehabilitation psychology desk reference ed. B Caplan. Aspen Pub.
2. Trieschmann R B. 1988 Spinal cord injuries: psychological social and vocational rehabilitation 2nd edition Demos Pub.
3. Richmond T S. Metcalf J A. Winterhalter J. 1987 Support group for families of acute neurological patients" Journal of neuroscience nursing Vol. 19 No 1 P. 40-43.
4. Oliver M. 1981 "Disability, adjustment and family life-some theoretical considerations". In handicap in a social world eds. Brechin. Liddiard & Swain Open University Press.
5. Parry G. 1990 "Coping with Crisis" British Psychological Society, Macmillan press.
6. Hodovanic B H. Reardon D Reese W Hedges B. 1984 "Family crisis intervention in the medical intensive care unit" Heart and lung Vol. 12 No. 3, P. 243-249.
7. Hart G. 1981 "Spinal cord injury: impact on client's significant others" Rehabilitation Nursing Jan-Feb P. 11-15.
8. Weller D J. Miller P M. 1977 "Emotional reactions of patient, family and staff in acute care period of spinal cord injury part 2" Social work in health care Vol. 3 No. 1, P. 7-17.
9. Solursh D S. 1990 "The family of the trauma victim" Nursing clinics of North America Vol. 25, No. 1, P. 155-162.
10. Lenehan G P 1986 "Emotional impact of trauma" Nursing clinics of North America Vol. 21, No. 4, P. 729-740.
11. Woodbury and Redd 1987 "Psychosocial issues and approaches" In spinal cord injury-concept and

care, especially if they are to assume a caring role in the future. Butt<sup>(24)</sup> stated that, it is important for staff to understand that to only rehabilitate the disabled is to treat them as living purely in a vacuum.

It is further suggested that as a family system is interdependent, any changes within the system will produce a cascading, crippling impact. It is important to provide psychological support and an environment which enables expression of feeling for the family during the crisis phase in order to facilitate a positive adjustment to the disability<sup>(19)</sup>.

Comprehensive education as an ongoing process which must involve not only the patient but also his significant others.

Realistic information should be given regarding the shared future which the patient and his family face.

1. The structural roles in the family do not change significantly<sup>(25)</sup>.
2. Satisfactory marital adjustment can and does occur<sup>(26)</sup>.
3. Wives who are carers may experience social isolation if support systems fail<sup>(27)</sup>.
4. Children of spinal cord injured fathers are well adjusted, emotionally stable and have normal sex role identities<sup>(28)</sup>.
5. Families can expect a decline in social activities<sup>(1)</sup>.
6. In many instances a reduced income is also a possibility<sup>(1)</sup>.

Wives of acutely injured men expressed a need to be very controlled and emotionally strong when with their husbands but also regretted that there was no one available to offer true support to them. They would

have especially appreciated support from someone who had been through this experience themselves. This is particularly pertinent since Trieschmann<sup>(2)</sup> reports that several of the wives picked up the distinct message from the health care professionals that marital distress and possible marital breakdown was an expected side effect of spinal cord injury.

### **Peer Groups**

Peer group counseling has been recommended for the injured person, and there does appear to be a need also for such support for family members. A family support group enables individual to better appreciate their own feelings of helplessness and fear for the future<sup>(13,3)</sup>. The potential for rehabilitation is also more easily recognised (Hart 1981). Such support groups can be useful therapeutic modalities to enhance peer interaction and explore common difficulties<sup>(24)</sup>.

### **Conclusion**

It is unfortunate that the family has so often been neglected in the care and rehabilitation process of a person with a spinal cord injury. It has been shown that a stable, functioning family has a significant, perhaps crucial role to play in the positive outcome of treatment and the health care team should seek to maximize this resource. It is in the best interest of the patient that his family also receives support and caring. In reality however, the major focus is on the person with the spinal injury and family members often feel that they are provided with little or no emotional support themselves while their relative was in hospital. Furthermore,

order to try to facilitate a favorable outcome.

### **The Needs of The Family**

There is an interrelationship between the needs of the patient and those of his significant others. Hart<sup>(7)</sup> believes that the more aware health care workers are of what the family and friends are experiencing the more likely they are to help them.

Hart identifies the following areas of need, as defined by the meaningful people in the patient's life:

1. Access to health care workers who are able to provide a realistic report of the patient's medical condition and prognosis. Anxiety thrives in the face of ambiguity<sup>(1)</sup>.
2. The need to provide emotional support to the patient. The family members wished to show active support<sup>(2)</sup>.
3. Need to receive emotional support and discuss their feelings.
4. The need to hope.
5. The need to know their loved one receives good care.

Hodovanic<sup>(6)</sup> found three re-curring themes amongst researchers who have examined the needs of families who are confronted with a crisis situation when their relatives is in the Intensive Care Unit (ICU):

I. The family members need to relive the accident or incident which caused the admission to the ICU<sup>(3)</sup>.

II. A fear of criticising the staff.

III. The desire for medical information.

Bray<sup>(19)</sup> emphasizes that the family members of a person with an acute injury

do not yet know what lies ahead and have difficulty imagining a future that involves caring for a chronically disabled member.

The family is also needed in the process of rehabilitation. Burnham et al<sup>(20)</sup> suggested that family involvement is essential from the beginning and reaches a high point at discharge and in home planning. Stewart<sup>(21)</sup> stated that "categorically rehabilitation programmes that ignores the client's relatives will fail".

### **The Role of the Rehabilitation Team-Recommendation**

The psychosocial approach reminds us that the family, employers and the patient's entire support system must, in differing measures, be involved if success in rehabilitation is to be accomplished<sup>(22)</sup>.

Richmond et al<sup>(23)</sup> reinforces the opinion that to not fully consider the importance of the family in the nursing management of the neurotrauma patient would be identical to treating the patient without fully assessing all body systems.

The health care team must be able to communicate to family members the importance that their involvement in the rehabilitation process is not only desirable but valued, a recognition that there are emotional needs, not only on the part of the patient but the family members as well.

The staff must remain aware of the impact of the injury on the family. Typically, families have found that rigid ward practices and administrations seem to be designed to exclude the family rather than involve them<sup>(18)</sup>. The important people in the patient's life should with his permission, be involved in all aspects of

these events. Depressive effects were evaluated on four outcome measures. Events included such aspects as sitting in a wheelchair for the first time, receiving a negative verdict from the doctor and being told about their prognosis. The most consistent changes towards deeper depression or greater elation resulted from events involving the important people in the patient's life. This finding emphasizes the comparative importance of close family and friends in connection with their well being. Post injury marital stability is of great concern, because rehabilitation outcome is related in part to the strength and quality of the patient's marital relationship<sup>(15)</sup>.

Trieschmann<sup>(1)</sup> quotes Harris et al (1973) who believes that the family determines the reaction of the patient to his disability. She also reports from Margolin and Lowery who indicates that more important than the disability itself is the quality of the interpersonal relationships within the family. If the family communicates an attitude of worth to the disabled person his self-concept will be maintained and he is more likely to participate in the rehabilitation process<sup>(1)</sup>.

Consideration must be given concerning the importance of the family and significant others, as these people will be actively involved in realising the limitations that disability can mean not only for the disabled person but for the whole family<sup>(4)</sup>. This may be critical, since whilst rehabilitation staff aim to project a positive view of the possibilities of living with paraplegia, spouses, relatives and friends may not hold such a positive view. Issues such as finance, access and

immobility may provide the crucial meanings of paraplegia. The family's response to the disability critically effects the patient's self-esteem, self-concept and body image.

The most important issue in rehabilitation is the willingness of the family and community to accept the spinal cord injured person as an equal partner in all activities. The response of the family to the injury is thus important even in the earliest stages of care<sup>(16)</sup>.

Bracken and Shepard<sup>(17)</sup> reiterate that stable, supportive relationships between the injured person and his family have been found to be of great value. They believe that a person not only needs to feel his presence is valued by significant others but it is also indispensable to them.

In examining the factors which make some patients adjust more positively to spinal cord injury these authors identify the pre-morbid personality and the influence of significant others as playing a central role.

Tucker<sup>(18)</sup> reinforces the view that supportive friends and relatives are a factor in a positive outcome, but stresses that less is known to staff about the dynamics of family reaction to disability than about any other problem of the disabled. It becomes clear from reviewing literature concerning adjustment to traumatic spinal cord injury that the responses of important people in the patient's life to the injury does play a large role in how well the patient responds. Therefore, it would be pertinent to review the role which the treatment team plays in supporting the family in



children. As Tolstoy wrote "All happy families resemble one another, each unhappy family is unhappy in its own way" , (in Anna Karenina). Spinal cord injury does not change the nature of a particular relationship as much as it may magnify and intensify both its flaws and strengths<sup>(11)</sup>. In the initial stages of the crisis this may be less apparent as the focus of the family is upon the individual and his survival.

### **Stages of Response**

In previous decades it was suggested that someone who sustains a spinal cord injury would go through various stages in order to come to an adoption or adjustment to disability. It was even proposed that the adjustment process of the family would mirror that of the patient and proceed through defined stages-fear, bargaining, impotence, anger, mourning, resignation, compromise, reconstruction, integration, and finally acceptance<sup>(2)</sup>. More recently objective research studies have concluded that there is no uniform response to spinal cord injury, either by the patient or his family. Vargo et al<sup>(12)</sup> devised a study to find evidence that families did indeed progress through "stages" of adjustment. Their findings were that the initial fear of impending death of the patient did not have profound psychological implications for their wives. Only one person in their study exhibited any denial of the severity of the injury and no one who prayed requested a miracle. The authors suggest that for an "emotion" to qualify as a "phase" it must have certain characteristics. The emotion must be sustained over a period of time, it must

characterize the individual throughout this time and it should exhibit behavioural manifestations which set it apart from other times and emotions. In this context, for depression to become a phase rather than a temporary emotion there must also be clinical signs, such as lowered motivation, withdrawal and decreasing activity and directive behaviour. Vargo et al<sup>(12)</sup> found only one wife who exhibited depressive behaviour following the injury of her husband. "Mourning" was described less in terms of a specific loss than to a sense of loss of their lives and lifestyles as they had known them prior to the accident. Vargo and Stewin conclude that to say that wives they studied all followed the same pattern of reactions would be a gross misrepresentation of the situation. More to the point, rehabilitation counselors would do well to place less emphasis upon categorization and labeling of behaviour and more on increased sensitivity to individual needs. It has been seen that the impact of the injury on the family is a crisis. It requires a profound alteration in the family function in the acute stage and the response will naturally have an impact on the patient also. Lawson<sup>(14)</sup> stated that clearly there is an interrelationship between the needs of patients and significant others.

### **The Impact of the Family's Response on the Patient**

In 1978 Lawson<sup>(14)</sup> reported on a study which investigated the events which occurred to ten high level spinal cord injured patients in the hospital phase of their rehabilitation and their responses to

turn produce feelings of guilt. Blame may be directed at the patient for contributing to/or not avoiding the accident which caused the injury, yet the family may also feel guilty for having such thoughts at a time when the injured person appears to be so vulnerable<sup>(8)</sup>. Guilt may result from having directly caused the accident, for example if another family member was driving the car when the accident occurred. The parent in the "I told you so" position, who many times may have called after a rebellious son, "you'll break your neck someday", finds a special horror in seeing his warning fulfilled, and with it an irrational but persistent sense of guilt from the magical thinking that there was a cause-and-effect relationship between warning and accident... obviously cause-and-effect guilt, such as that of the father who gave his son the motorcycle he rode into a wall, may be easier to deal with than the subtler kinds<sup>(9)</sup>.

### **Impact on Family**

The "identified patient" is obviously the major victim of a traumatic event, but the family are victims too. True they are not physically shattered like the body on the stretcher, but they can be emotionally shattered, psychologically shattered and their lives can be shattered as well<sup>(9)</sup>. Lenchan<sup>(10)</sup> supports the view that patients who have suffered trauma do not suffer alone, but that the more severely they are injured, the more their families become patients as well. She states that the family members may endure more psychological suffering than the patient as they have the additional burden of feeling powerless in the face of a loved one's desperate need.

The family who are faced with the crisis of a traumatic spinal cord injury are reacting to various factors. There is the sudden and unpredictable nature of the accident or trauma, issues of anger or guilt, the fear for the future, both in terms of the possible death or permanent disability of the patient, and also to the future consequences to the family unit. These issues will be made more complex by the special nature of the relationships between the family members.

### **Religious Beliefs**

Religious beliefs may compound the stress of the trauma due to a crisis of faith. Solursh<sup>(9)</sup> suggests that the Judeo-Christian tradition leads people to believe that good things happen to good people, and that basically a person gets from life what they deserve. Families may agonize over how such a devastating injury could have been "allowed" to happen, and may be unable to deal with the fact that no cure is in fact possible.

### **Practical Problems**

Family members may also be coping with other related problems, such as getting to and from the hospital, sudden loss of incomes, dealing with lawyers and insurance companies, child care and the reaction of their children<sup>(11)</sup>.

### **Relationships**

It is important to understand the nature of relationships within a family. The crisis and stress will impact upon a pre-existing structure of relationships; not all marriages are positive and fulfilling. Not all parents enjoy a good rapport with their

## **Introduction**

A literature review, reveals a scarcity of published work in this area of spinal cord injury rehabilitation. Where mention is made of the importance of the family, this has tended to focus upon how the family can help their injured member, rather than how the treatment team can aid the family. Yet, "it is vital to the successful rehabilitation of disabled patients that the problems of their families be addressed, understood and managed"<sup>(1)</sup>.

Two issues emerge. One concerns the factors in the response of the family which mitigate for a positive adjustment to disability by both patient and family. The other concerns the actions which can be taken on the part of the treatment team to include the family in the rehabilitation process in order to maximize their coping skills and eventual adjustment<sup>(1,2)</sup>.

## **Definition**

Traumatic spinal cord injury occurs predominantly in young adult men. "Family" will be regarded in this context as including the parents and siblings of a single young man, and as including the partner and children in the instance of a married man.

## **The Impact of the Crisis on the Family**

"Spinal cord injury occurs not just to the individual but the entire family"<sup>(3)</sup>. Yet health care professionals have tended to focus their efforts for rehabilitation solely upon the disabled individual. Oliver<sup>(4)</sup> suggests that it is often harder for family

members to adjust to a traumatic spinal cord injury, than it is for the injured person himself<sup>(4)</sup>.

## **The Nature of Crisis**

Parry<sup>(5)</sup> defines a crisis situation as involving an unexpected triggering event, a sense of uncontrollability and a disruption of routine with uncertainty about the future. This is a situation which continues, it is not something which is readily resolved. This description of a crisis is as applicable to the family as it is to the person suffering from spinal cord injuries. "After learning of diagnosis and entire family may be in crisis. In such situations the nuclear family should be viewed as a unit facing crisis... when the illness is severe enough to warrant intensive care, it is obviously life threatening and produces severe emotional stress"<sup>(6)</sup>.

## **Response to Crisis**

Parry<sup>(5)</sup> suggests that there are many individual responses to a crisis, including sleep disturbances, disrupted appetite, anxiety, problems with concentration and reasoning, mental preoccupation with, or avoidance of the problem and anger or guilt. Hart<sup>(7)</sup> studied the impact of a spinal cord injury on the patient's "significant others". She found that the spouses or parents reported the occurrence of the spinal cord injury to be the most severe crisis that they had ever experienced.

## **Anger and Guilt**

Trieschmann<sup>(1)</sup> indicates that it is not unusual for family members to be angry at the injured person, and that this may in

## Review Article

# The Psychosocial Impact of Spinal Cord Injury on the Family: Literature Review

Jamal Al-Smadi, M. Soudi, A. Hadidi, A. Obiedat, Walid Shnnaigat

## الاثار النفسية الاجتماعية المترتبة على اصابات النخاع الشوكي

”مراجعة“

جمال الصمادي، منذر السعودي، علي الحديدي، عبدا لله عبيدات، وليد شنيكات

### المخلص

لقد أكدت (الأبحاث) التي تهتم بتعايش مرضى إصابات النخاع الشوكي على المدى الطويل مدى الأهمية الكبيرة لكل من الدعم الفردي والدعم الاسري على النتائج النهائية لهذا المرض. وقد تأكد الباحثون أن الدعم العائلي يمنح المريض المصاب بالنخاع الشوكي فوائد جمة، غير أنهم لم يتعرضوا بكتبتاتهم إلا في النذر اليسير للانفعالات العائلية نحو ذلك المريض المصاب، وهناك أمران مهمان ظهرا:

١- ردود فعل العائلة.

٢- الخطوات التي من الممكن اتخاذها من قبل الفريق المعالج.

### ABSTRACT

Research concerning the long term adjustment to a traumatic spinal cord injury, has identified interpersonal support as an important factor, which is related to a favourable outcome. The benefits to the patients of a warm and supportive family background have been recognised, yet there is little data which examines the reaction of families to spinal cord injury. Two issues emerge. One concerns the factor of the response of the family, the other concerns the actions which can be taken on the part of the treatment team

52. Bolton, D., Collins, Sterinberg, D (1983). Treatment of obsessive compulsive disorder in adolescence: A report of fifteen cases. *B. J. Psychiatry*, 142, 456-464.
53. Apter, A, Bernhout, E. & Tyano, S. (1984). Severe obsessive compulsive disorder in adolescence: A report of eight cases. *Jour of Adolesc.*, 7, 349-385.
54. March, J. S., (1995). Cognitive behavioural Psychotherapy for children and adolescents with O.C.D: A review and recommendations for treatment *J. Am. Acad. Child Adlesc. Psychiatry*, 34: 1,7-18.
55. Leonard, H.L., Swedo, S., Rapoport, J. L., Koby, E. V., Lenane, M., Cheslow, D. L. & Humburger, S. D., (1989). Treatment of Obsessive Compulsive Disorder with Clomipramine and Desipramine in children and adolescents a double-blind crossover comparison *Arch. Gen Psychiatry*, 46, 1088-1092.
56. Leonard, H. L., Swedo, S., Lenan, M., Rettew, D. C., Cheslow, D. L. Humburger, M. S. & Rapoport, J. L. (1991). A double-blind desipramine substitution during longt-term clomipramine treatment in children and adolescents with obsessive compulsive disorder. *Arch. Gen Psychiatry*, 48, 922-927.
57. Riddle, M., Hardiam & King, R (1989). Fluoxetine treatment of children and adolescents with Tourette's and Obsessive Compulsive disorders. Presented in annual meeting of the American Academy of Child and Adolescent Psychiatry, New York.
58. Geller, D., Biederman, J., Reed, E. D., Spencer, T., & Willense, T. (1995). Similarities in response to fluoxetine in the treatment of children and adolescents with obsessive compulsive disorder. *J. Am. Acad. Child Adolesc. Psychiatry*, 34:1, 36-44.
59. Riddle, M., Scahill, L., King R. et al (1992). Double-blind. crossover trial of fluoxetine and placebo in children and adolescents with obsessive compulsive disorder. *J. Am. Acad. Child Adolesc Psychiatry*, 31, 1062-1069.
60. Leonard, H. L., Swedo, S., Lenane, M., Rettew, D.C., Humburger, MS., Bartko, J.J. & Rapoport, J.L (1993). A two to seven year follow up study of fifty four obsessive children *Arch Gen Psychiatry*, 50, 429-438.

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40. Bear, D. & Fedio, P. (1977) quantitative analysis of interictal behaviour in temporal lobe epilepsy. *Arch of Neurology*, 34, 454-467.
41. Levin, B. & Duchowny, M. (1991). Childhood obsessive compulsive disorder and cingulate eiplespy. *Biological Psychiatry*, 30, 1049-1055.
42. Freud, S (1909). Notes on a case of obsessional neurosis, In: Strachey, J. (Ed). *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, Vol. 10 (1957), pp. 153-318, Hogarth Press, London.
43. Luxenburgen, J. S., Swedo, S. E., Flament, M. F., Friedland, R. P., Rapoport, J. L. & Rapoport S. I (1988), Neuro-anatomic abnormalities in obsessive compulsive disorder detected with quantitative X-ray computed tomography. *Amer. J. Psychiatry*, 145, 1089-1093.
44. Baxter, L. R., Phelps, M. E., Mazzdiotta, J. C., Schwartz, J. M., Gerner H., Salin, C. E., & Sumida, R. M (1985). Cerebal metabolic rate for glucose in mood disorder, Studies with positron emission tomography and fluorodexyglucose. *Arch. Gen Psychiatry*, 42, 441-447.
45. Baxter, L. R., Phelps, M. E., Maxxiotta, J. E., Guza, B. H., Schwartz, J., M. & Selin, C. E. (1987). Local Cerebral Glucose rates in obsessive compulsive disorder: A comparison with rated in unipolar depression and in normal controls. *Arch Gen, Psychiatry*, 44, 211-218.
46. Insel, T., Muller, E., Alterman, L., Linnolia, M. & Murphy, D., (1985). Obsessive compulsive Disroder and serotonin: Is there a connection? *Biological psychiatry*, 20, 1174-1188.
47. Murphy, D., Zohar, J., Pigott, T., & Insel, T. (1989). Obsessive compulsive disorder as a 5-HT subsystem behavioral disorder. *British Journal of Psychiatry*, 155(supple), 15-24.
48. Hanna, G. L., McCracken, J. T. & Cantwell, D. P, (1991). Prolactin in Childhood obsessive-compulsive disorder, Clinical correlates and response to clomipramine *J. Am Acad. Child Adolesc. Psychiatry*, 30:2, 73-178.
49. Kruesi, N., Papoport, J., Hamburger, S., Potter, W., Lenane, M., & Brown, G (1990). Cerbrospinal fluid monoamine metabolites, aggression and impulsivity disruptive behaviour disorders of children and adolescents. *Arch Gen Psychiatry*, 47, 419-426.
50. Casas, M. E., Alvarez, P., Duro, C., Garica Ribera, C., Udina, C., Velat, A., A., Abella, D., Rodriguez-Espinosa, J., Salva, P., & Jand, F., (1986). Antiandrogenic treatment of obsessive compulsive neurosis, *Acta Psychiatrica Scandinavica*, 73, 221-222.
51. Stanley, L (1980). Treatment of ritualistic behaviour in an eight year old girl by response prevention: A case report. *J. Child Psychol Psychiat*, Vol. 21, 85-90.

- O.C.D. In: Rapoport, J. L (Ed.) *Obsessive Compulsive Disorder in Children and Adolescents*, pp. 269-288, American Psychiatric Press, Washington D.C.
26. Swedo, S., Leonard, H.L., Kruesi, M. J. P., Rettew, D., Listwak, S. J., Berrettini W., Stipetic, Hmburger, S., Gold P. W. Z & Rapoport, J. L. (1992). Cerebrospinal fluid neurochemistry of children and adolescents with obsessive compulsive disorder *Archives of General Psychiatry*, 49, 2-36.
27. Karno, M., Golding, J., Sorenson, S. & Burnan, A. (1988). The epidemiology of obsessive compulsive disorder in five US communities. *Archives of General Psychiatry*, 45, 1094-1099.
28. Rapoport, J. L. (Ed.) (1989a). *Obsessive Compulsive Disorder in children and Adolescents* American Psychiatric Press, New York.
29. Rapoport, J. L. (1989c). The new biology of Obsessive compulsive disorder. *Scientific American* 260, 82-89.
30. Leonard, H. L., Lenane, M., Swedo, S., Rettew, D., Gershon, E. & Rapoport, J. L. (1992). Tics and Tourette's syndrome: A 2 to 7 year. Follow-up of 54 obsessive compulsive children *American Journal of psychiatry*, 149, 1244-1251.
31. Gard, L. R., Pelocovitz, D., Olosn, Mathew, S. M. & Grad, G. J (1987). Obsessive compulsive symptomatology in children with Tourette's Syndrome. *Journal Amer, Acad. Child Adoles, Psychiatry*, 26, 67-73.
32. Pauls, D.L., Towbin, K. E., Leckman, J. F., Zahner, G. E. P. & Gohen, D., (1986) Gilles de la Tourette's syndrome and obsessive-compulsive disorder: evidence supporting a genetic relationship. *Archives of general psychiatry*, 34, 1180-1182.
33. Montgomery et al (1982). In Rutter and Hersov. *Child and adolescent Psychiatry*. 2nd edition, (1989), page 518. Blackwell Scientific publication.
34. Pauls & Leckman (1986). In *paediatric Neurology*. (Ed) Edward M. Brett. 2nd edition (1991), Page 273. Group U.K limited (1991).
35. Denckla, M. B. (1989). The neurological examination. In: Rapoport, J. L (Ed). *Obsessive compulsive Disorder in children and Adolescence*, pp. 107-118, American Psychiatric Press, Washington DC.
36. Wise, S. & Rapoport, J. L (1989). Obsessive compulsive disorder. Is it basal ganglia dysfunction? In: Rapoport, J. L. (Ed). *Obsessive-Compulsive Disorder and Adolescents*, pp. 327-347, American Psychiatric Press, Washington D.C.
37. Rapoport, J. L (1991) Recent advances in obsessive compulsive disorder. *Neuropsychopharmacolog*, 5-19.
38. Bolton, D. & Turner, T. (1984). Obsessive compulsive neurosis with conduct disorder: a report of two cases, *Journal of Child Psychology and Psychiatry*, 25, 133-139.
39. Lewis, A. (1936) Problem of obsessional illness. *Proceeding of the Royal Society of Medicine*, 29, 325-336.

11. Black, A. (1974). The natural history of obsessional neurosis in: Beech, H. (Ed). *Obsessional States*, PP. 19-45, Methuen, London.
12. Flament, M.F., Whitaker, A.I, Rapoport, J. L., Davies, M., Zeremba-Berg C., Kalikown, D., Sceery, W. & Shaffer, D. (1988). Obsessive compulsive disorder in adolescence: An epidemiological study. *J. Am. Acad. of Child Psychiatry*, 27, 764-771.
13. Whitaker, A. Johnson, J. Schaffer, D, Kalikow, K. Rapoport, J. L., Walsh, B. T. Davies M., Braiman, S. & Dolinsky, A. (1990). Uncommon troubles in young people: Prevalence estimates of selected psychiatric disorder in non-referred adolescents population. *Arch. Gen Psychiatry*, 47, 489-496.
14. Toro. J., Cerverw, M., Ocejo, E., M, Salamero, (1992). Obsessive compulsive disorder in childhood and adolescence: Clinical study, *Child Psychol. Psychiatry Vol. 3 No. 6 pp 1025-1037*.
15. Flament, M. (1990). Epidemiology of obsessive Compulsive disorder in children and adolescents. *Encephale. VI. 16 Spec No P 311-6*.
16. Valleni-Basile, LA Garrcon. CZ Jackson, KL Waller, JL Mckeown, RE Addy, CL Cuffe (1994). Frequency of obsessive-Compulsive disorder in a community sample of young adolescents. *J., Am Acad. Child adolesc. Psychiatry. Vol. 33, No. 6 P 782-91*.
17. Gesell, A.L., (1949). *Child development: An Introduction study of human growth*, New York, Harper Brother, pp 263.
18. Renger E. G (1959). Obsessive compulsive neurosis. *Acta Psych. Neur. Scandinavia. 34, 110-125*.
19. Fine, S. (1973) Family therapy and behavioral approach to childhood obsessive compulsive neurosis. *Arch of General psychiatry*, 28, 695-697.
20. Despert L. (1995) Differential diagnosis between obsessive-compulsive neurosis and schizophrenia in children in: Hoch, P. H. & Zubin, J. (Eds) *Psychopathology of childhood*, pp. 240-253, Graune & Stratton, New York.
21. Adams, P.L (1973). *Obsessive children*, Penguin Books, New York.
22. Swedo, S., Rapoport, J. L., Leonard, H. L., Lenane, M. & Cheslow, D. (1989c). obsessive compulsive disorder in children and adolescents: clinical Phenomenology of 70 consecutive cases. *Archives of General Psychiatry*, 46, 335-341.
23. Rapoport, J. L. Swedo S.E & Leonard, H.L., (1992) Childhood obsessive compulsive disorder. *Journal of clinical Psychiatry*, 53, 11-16.
24. Rapoport. J. L., Swedo, S. & Leonard, H. (1994). *Obsessive Compulsive Disorder*. In: *Child and Adolescent Psychiatry, Modern Approaches*, Ed: Rutter, M.,: Taylor, e., & Hersov, L., 3rd Edition, Blackwell Scientific publication.
25. Swedo S. (1989). *Rituals and releasers: an ethological model of*



## Conclusion

O.C.D is a major neuro-psychiatric illness that appears to be similar in children and adults in clinical presentation and response to pharmacological treatment. Besides this retrospective studies have reported that one third to one half of adult subjects experience the onset of O.C.D in childhood or adolescence, which suggests that it is the same illness with early manifestations probably appearing in childhood. But it appears that it is

missed or rarely recognized in children because it might be considered as part of their development or due to illness (fluctuations and spontaneous remission).

Looking at review articles it was concluded that O.C.D is mainly a disorder of adolescence as the peak period of onset occurs during this time. This might be due to the adolescence period acting as a precipitant factor, as psychiatric disorders increase during this period.

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## References

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1. Esquirol, J. E. (1838). *Des Maladies Mentales*, Vol. 2 Paris: La Fayette.
2. Schneider, K. (1925). Compulsive state and Schizophrenia. *Archiv, Fur Psychiatrie and Nervenkrankheiten*, 74, 93-99.
3. Carr, A.T. (1974) Compulsive neurosis: A review of the literature. *Psychological Bulletin*, Vol. 81, No 5, 311-318.
4. Freud, S. (1895) Obsessions and Phobias: Their Physical mechanisms and their etiology. In Strachey, J (Ed.) *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, Vol. 1(1957), pp. 128-137, Hogarth Press, London.
5. Rapoport, J. L. (1986). Annotation: childhood obsessive compulsive disorder. *Child Psychology and Psychiatry* 27, 289-296.
6. Judd, L. (1965). Obsessive compulsive neurosis in children, *Archives of general psychiatry*, 12, 136-144.
7. Hollingsworth, C.; Tanguay, P., Grossman. L. & Pabts, P. (1980). Long-term outcome of obsessive compulsive disorder in childhood. *Journal of the American Academy of Child Psychiatry*, 19, 134-144.
8. Rutter, M. Tizard, J. & Withmore, J. (1970). *Education Health & Behavior*, London: Longmans.
9. Robins. L. Helzer, J., Crougham J., & Raxtcliffe, K (1981). The NIMH epidemiologic Catchment Area study. *Archives of General Psychiatry*, 38, 381-389.
10. Karno, M & Golding, J. (1990). Obsessive Compulsive disorders. In: Robins, L & Regrer, D.A. (Eds). *Psychiatric Disorders, in America: The Epidemiologic Catchment Area Study*, Free Press, New York.

per day over an average follow-up period of 19 months. Similar effects were observed in children and adolescents. The findings of the study are consistent with previous reports on the efficacy of serotonergic antidepressants in O.C.D.<sup>(58-59)</sup>. The response rate of 74% observed in this sample was higher than the 44% response rate noted in the previously reported study with fluoxetine by Riddle<sup>(59)</sup>. This finding may be accounted for by the retrospective nature of the assessment method. But also it could be attributed to the use of a higher daily dose of fluoxetine. The study by Riddle<sup>(59)</sup> was the only controlled study of fluoxetine in 14 patients using a crossover design, and a daily average dose was estimated at less than 0.5 mg/kg per day.

This work would suggest the urgent need for more controlled studies of serotonergic agents with juvenile O.C.D, with particular attention being given concerning the daily dosage and duration of use.

Over viewing these treatment measures of O.C.D, future research works needs to focus on controlled trials, comparing medications, cognitive-behavioural therapy and combination treatment to determine whether medications and behavioural therapy are additive in their effects on O.C.D symptoms reduction. Studies concerned with treatment are few in number and not similar in their methodology, but it appears in children with O.C.D that a combination treatment of anti-obsessional drugs with behavioural therapy is the most effective treatment, although the evidence of the

effectiveness of anti-obsessional drugs is still limited.

## Prospective Views on O.C.D

Most of follow-up studies of children and adolescents with O.C.D were conducted before the ready availability of effective pharmacological and specific behavioural treatment, which gives a very poor outcome.

Later a larger study<sup>(60)</sup> carried out on a 2-7 years prospective follow-up of 54 O.C.D children and adolescents who had behavioural therapy and drug treatment of serotonin re-uptake inhibitors, resulting in improved outcomes, i.e. 18 (33%) symptoms free, 20 showed criteria for O.C.D and 21 (61%) on going drug treatment. He noted some factors which predict more severe outcomes of O.C.D:

- Earlier history of tics.
- Lifetime history of tics.
- Severe O.C.D symptoms.
- Presence of family psychopathology (axis I psychiatric disorder).
- Symptom severity after short-term drug treatment predictive for long term outcome.

With the new treatments available most patients with paediatric O.C.D can expect significant long-term improvement but not complete remission. This supports the chronicity and intractability of the disorder, as still there is a remaining significant subgroup of subjects who exhibit continued morbidity despite multiple interventions.

replace rate similar to that for placebo. Beside this, as the previously experienced relapsed patients become more dysphoric the Hamilton Depressions Score was significantly high (age of onset, duration, severity of illness and plasma concentration of drug did not predict clinical response to clomipramine). The outcome of this study is clinically and statistically significant. As desipramine and an effective anti-depressant drug, the superiority of clomipramine as anti-obsessional will be more significant if it is compared with other drug which has anti-obsessional properties.

Leonard<sup>(66)</sup> studied the same children and adolescents (who participated in the comparison study of clomipramine and desipramine in 1989). He selected 26 children and adolescents who were long term clomipramine hydrochloride maintenance treatment (17.1 + 8.3 months). They entered on eight months double blind desipramine hydrochloride substitution.

All patients received clomipramine for the first three months, then half continued with clomipramine therapy and half had desipramine blindly situated for the next two months. All subjects again received clomipramine for the last three months of the study (six patients dropped out for acute exacerbation of symptoms of depression, O.C.D and paranoia). The result was 8(89%) of 9 of the substituted and only 2(18%) of 11 of the non-substituted group subjects were replaced during the two months comparison period. It was concluded that long term clomipramine

treatment seems necessary for this population of children and adolescents with O.C.D.

There is a limitation of this study, the sample was a self selected population of patients on long term clomipramine treatment, patients who had remission of their O.C.D either spontaneously or in response to successful pharmacological treatment. The patients could be distinguished between clomipramine and desipramine because of the anti-cholinergic properties of the former. Even with the continuous clomipramine treatment there are continued O.C.D symptoms, and variability of severity over time noticed over all of the selected sample.

Riddle<sup>(57)</sup> concluded that fluoxetine appeared to be safe and well tolerated in a dosage of 10 to 40 mg per day in a group of 10 children and adolescents with primary O.C.D or tourette's syndrome with O.C.D. Also fluoxetine has been used for 28 paediatrics in NIMH who failed to respond to clomipramine. It was also well tolerated by the adolescents, and many showed and did improve in their clinical response when treated with 20-80 mg per day. Most patients started at lower doses (5-1 mg day).

In a recent study by Geller<sup>(58)</sup> which evaluated retrospectively the usefulness of fluoxetine in the long term treatment of both children and adolescents with O.C.D by using the Clinical Global Impression Scale, 74% out of 38 identified patients showed a moderate to marked improvement of O.C.D symptoms on average doses of 1.0mg/kg

of 15), 47% entirely improved (7 out of 15) and 14% symptoms reduced (6 out of 15). On a follow-up over a 9 months to 4 years period 2 patients showed episodic courses, 7 patients were symptoms free, 3 patients were mildly incapacitated and one patient severely incapacitated, (follow-up was not possible for 2 patients).

In a review of another study performed by Apter<sup>(53)</sup> in Geha Hospital, eight severe O.C.D adolescents who had obsessional thoughts (sexual themes, guilt, rigid moral conflicts), extremely severely disturbed socially with a family history of psychopathology (affective disorders and personality disturbance). All of the eight patients received behavioural therapy of exposure and response prevention which failed due to lack of co-operation from the patients. Four cases were given intensive psychodynamically oriented psychotherapy and four educational supportive psychotherapy. Four patients received clomipramine therapy (150-200mg daily) where it was felt that this would not be detrimental to the psychotherapeutic process. The response to this kind of therapy was surprisingly, good in all patients. Seven out of eight patients displayed fair improvement. In this study all patients came from a family background with a history of a psychiatric disorder plus clear precipitating factors. hospitalization and milieu therapy may have play major roles in alleviation of their symptoms. This work did not give a clear conclusion about the type of treatment which specifically helped to resolve their

symptoms (was it clomipramine, psychodynamic or educational therapy). March<sup>(54)</sup> critically reviewed the current literature on cognitive-behavioural psychotherapy for O.C.D in children and adolescents and identified 32 published investigations. He concluded that there is empirical evidence to suggest that cognitive-behavioural psychotherapy, alone or in combination with pharmacotherapy is an affective treatment for O.C.D in children and adolescents.

Leonard<sup>(55)</sup> conducted a controlled double blind cross-over comparison study of 48 children and adolescents aged ( $13.86 \pm 2.87$  Years) with severe primary O.C.D (rituals and/or repetitive thoughts which caused significant interference at home and school in the absence of another mental illness). The age of onset was ( $12.22 \pm 88.5$  years), duration of illness ( $3.6 \pm 2.4$  years) and the previous medication discontinued at least three weeks before admission. Active treatment then consisted of two consecutive five week treatments with randomized double blind administration of clomipramine or desipramine in doses targeting 3mg/kg as tolerated. It was noted that there were no improvements in any subject condition while given placebo. Clomipramine but not desipramine produced a striking in O.C.D ratings and in depression ratings as measured in the Hamilton & NIMH Depression Scale. Clomipramine was superior over desipramine on most O.C.D rating scale measures. When desipramine was given after clomipramine subjects experienced a

postpartum O.C.D and reports of successful anti-androgen therapy<sup>(50)</sup>.

It appears that the high possibility of associating childhood O.C.D with organic illnesses like TS, Sydenham chorea and epilepsy, may be reflective of giving the impression that organic factors may play a major role as aetiological factors. Also this is supported by recent studies of O.C.D which suggested the involvement of basal ganglia and frontal lobes.

## Treatment

Obsessive symptoms are generally very distressing to the patient. The literature on the treatment of obsessive compulsive disorders in adolescence are relatively limited, and more rare in regard to childhood O.C.D mild obsessional symptoms are occasionally presented as secondary to more distressing problems.

In a review of a case report of treatment of ritualistic behaviour in an eight year old girl by response prevention carried out by Lynn Stanley<sup>(51)</sup>, the symptomatology was reduced within one week, (in this case the history was short, the patient was highly motivated and the parents acted as therapists). The symptoms were purely rituals of short durations (6 months, not complicated with other psychiatric complications such as anxiety or depression) and the family appeared to be functioning cohesively. Beside this the parents were highly motivated and they acted as therapists at home. So family support and involvement in the treatment with a consistent and supervised response

prevention programme illuminated the symptoms. At a one year follow-up all was well.

In another study at The Bethlem Royal and Maudsley Hospital during treatment of 15 adolescents with O.C.D with response prevention and family involvement in the therapy<sup>(52)</sup>, the treatment was primarily response prevention with family therapy, although other components of treatment involved such factors as medication, psychotherapy and milieu therapy, but it was not the centre of treatment. The main treatment was self imposed response prevention. Children were strongly and consistently motivated to change. By engaging the parents passively and actively by reorganizing their authority and by increasing their tolerance to their children's distress and anger the response treatment was generally good. From this study response prevention is an important treatment for O.C.D in adolescence. Response prevention works against the symptoms becoming habitual and gives children and parents the clear message that rituals are to be abundant without further ado. In this study each case was treated individually according to its needs, (medication with response prevention for the depressed case and family therapy with response prevention to those cases whose symptoms are maintained or enhanced by parental involvement). So the treatment differed, it had multi-modality features, which also does not show the effectiveness of a specified treatment. Anyhow, the outcome was 87% improvement (13 out

frontal cortex, cingulate gyrus and/or caudate nuclei of O.C.D patients<sup>(44,45)</sup>.

Swedo<sup>(26)</sup> suggested involvement of the orbito-frontal regions in the pathophysiology of O.C.D. They investigated the defect of drug treatment in the childhood onset O.C.D and repeated PET scans in thirteen adults with O.C.D, (eight taking clomipramine and two taking fluoxetine and (the remaining three) taking no drugs), after at least one year of pharmacotherapy. As a group the patients showed significant improvement on all O.C.D and anxiety ratings. PET scans revealed a significant decrease in normalized orbito-frontal regional cerebral glucose metabolism bilaterally. Among the treated patients the decrease in right orbito-frontal metabolism was directly correlated with two measures of O.C.D improvement. However, these findings still require further research before definite involvement can be confirmed.

O.C.D may be exacerbated by serotonin agonists. The serotonergic hypothesis is derived from selective efficacy of drugs that have specific serotonergic activity<sup>(46)</sup>. The anti-obsessional effect of clomipramine and other anti-obsessional drugs in reducing symptoms is not clearly understood, but could be due to an alteration in serotonin levels, changes in monoamines or changes in the receptor functions<sup>(47)</sup>.

Recently<sup>(48)</sup>, examined serotonergic dysfunction in 18 children and adolescents with O.C.D by studying the effect of chronic clomipramine administration on basal prolactin concentration was performed. Basal

prolactin concentrations were measured before treatment in 18 children and adolescents as well as in 15 of these patients after four and eight weeks of clomipramine treatment. The baseline prolactin level were significantly increased after treatment. This suggests that if the changes in prolactin levels observed in this study are due to changes in serotonergic neurotransmission, clomipramine treatment produces an adaptive decrease in the response in the serotonergic receptors. There needs to be further studies to clarify the interaction between serotonergic and dopaminergic systems.

Kruesi<sup>(49)</sup> have examined cerebro-spinal fluid, levels of somatostatine and 5HIAA in children with disruptive behaviour disorders and O.C.D. Disruptive behaviour disorder patients had a decreased concentration of somatostatine and 5HIAA, compared with O.C.D children. (This study lacks a control group).

Swedo<sup>(26)</sup> studied cerebro-spinal fluid monoamines in 43 O.C.D children and adolescents. They found that cerebro-spinal fluid 5HIAA (5 Hydroxy Indole Acetic Acid), the major metabolite of serotonin, correlated most strongly with response to clomipramine.

Hormonal dysfunction and O.C.D may be aetiologically related<sup>(25)</sup> O.C.D symptoms may get worse during early puberty and female patients often experience an increase in obsessive thoughts and rituals immediately before their menses<sup>(25)</sup>. Other hints at neuro-endocrine factors in O.C.D include

O.C.D may both be a manifestation of basal ganglia dysfunction secondary to a number of causes<sup>(23)</sup>.

Toro<sup>(14)</sup> found that 32% of their patients have also suffered tics or TS. Montgomery<sup>(33)</sup> has reported a high incidence of OCD in the first degree relatives of TS patients.

Pauls & Leckman<sup>(34)</sup> in segregation analysis in 30 families identified through 27 dominant index cases results consistent with an autosomal dominant inheritance.

The evidence here appears to be that chronic tics and O.C.D may be an alternative phenotypic expression of the TS diathesis.

The increased incidence of motor tics, as well as chorioform movements observed in children and adolescents with O.C.D all suggest basal ganglia pathology in association with O.C.D<sup>(35,36)</sup>. Current research with acute Sydenham Chorea subjects shows a parallel course between onset and decline of chorea and obsessive compulsive symptoms<sup>(37)</sup>.

The relationship between the childhood onset of O.C.D and Obsessive Compulsive Personality Disorder is unclear. Children may initially present with O.C.D, and at follow-up sessions meet the criteria for Obsessive Compulsive Personality Disorder, where others begin with Obsessive Compulsive Personality and later develop Obsessive Compulsive Disorder, i.e. Obsessive Personality Disorder developed as secondary or as an adaptive course to O.C.D<sup>(25)</sup>.

Childhood O.C.D has a strong association with eating disorders<sup>(13)</sup> and

less frequently with disruptive behaviour and substance abuse<sup>(25,38)</sup>.

Aubrey Lewis<sup>(39)</sup> noted several cases with a childhood onset of encephalitis of febrile seizure. Obsessive phenomenon have long been recognized in association with seizures, particularly Temporal Lobe Epilepsy<sup>(40)</sup>. Levin & Duchowny<sup>(41)</sup> reported an association between epilepsy and O.C.D in their case report of an eleven year old girl with intractable seizures of the right anterior cingulate gyrus, who also manifested symptoms of severe O.C.D and progressive cognitive and psychosocial dysfunction. Cingulotomy resulted in freedom from seizures and significant improvement in her obsessive compulsive symptoms.

## Aetiology

Freud<sup>(42)</sup> was the first author who attempted to formulate an integrated theory to account for genesis of compulsive phenomena. In his 1895 publication compulsions were considered to be the result of the operation of psychic mechanism through which individuals perform symbolic rituals to avoid contemplation of previously repressed material that has gained access to the consciousness.

Several brain imaging studies implicate frontal lobes and basal ganglia pathology in O.C.D<sup>(37)</sup>. The caudate nuclei are significantly smaller in the O.C.D group<sup>(43)</sup>. PET studies conducted in the NIMH University of California, have found regional glucose metabolism in O.C.D to be elevated in the orbital

thought. The OCD children reported that performing the repeated rituals would protect them or their loved ones<sup>(26)</sup>. In children with O.C.D, approximately one third reported that certain stimuli triggered their rituals. Secrecy is typical. Hand washing many disguise as due to more frequent voiding, and rituals are carried out in private so children are symptomatic for months before their parents are aware of the problem. Usually teachers and peers become more aware only when there is much greater severity because children expend greater effort controlling their behaviour in public and 'let go' when at home. Most children find keeping busy, having others structure their time and carrying out physical activity to be helpful in supporting obsessive compulsive symptoms, while stress of any sort usually aggravates their disorder<sup>(24)</sup>. 50% of O.C.D subjects will also merit another axis I diagnosis, often anxiety or affective disorders<sup>(22)</sup>. Also, 40% of children with typical compulsive rituals deny associated obsession, which is the same figure as for adults<sup>(27)</sup>.

Young and old patients, at least some of the time, believe their obsessions dispute diagnosis. The experience to date suggests that DSM-IV adult criteria are appropriate for diagnosis <sup>(28,29,22)</sup>.

It appears that several forms of repetitive behaviours are common, particularly between the ages of four to ten. But much of this behaviour cannot strictly be called compulsive because the child does not struggle against it.

It appears that obsessional disorders are well established by late childhood, even

if the first symptoms may appear as long ago as during early childhood

## Associated Disorders

One quarter (i.e. 26%) of children had O.C.D as their sole diagnosis<sup>25</sup>. Associated diagnosis<sup>26</sup> seen most frequently were:

- Depression (39%)
- Simple Phobia (17%)
- Over Anxious Disorder (16%)
- Separation Anxiety Disorder (7%)
- Developmental Disabilities (24%)
- Oppositional Disorder (11%)
- Attention Deficit Disorder (10%)

At a 2-7 year follow-up study 6 of 53 (12%) O.C.D children met the criteria for Tourette's syndrome<sup>(30)</sup>. All had had an early presentation of their O.C.D with typical symptoms of washing or checking. In addition, all had other symptoms that were difficult to categorize as a ritual or a tic; e.g. smiling, spitting, touching, taping and bouncing. These behaviours demonstrated the difficulty of distinguishing between the compulsive rituals of O.C.D and the complex tics of Tourette's Syndrome (TS). 20-80% of Tourette's disorder have been reported to have O.C.D symptoms, and this is documented in several studies<sup>31-32</sup>.

In a Tourette's disorder there is an increased familial rate of O.C.D independent of the presence of obsessive compulsive symptoms in the proband. Increased familial rate of Tourette's disorder and tics are seen with O.C.D probands, particularly for male relatives<sup>(30)</sup>. Tourette's disorder and



than the other countries. The possible explanation why prevalence figures vary so much is that the:

1. OCD in other countries remains undiagnosed and untreated.
2. These discrepant findings may reflect true differences in the prevalence of the populations.
3. Variations may reflect differences in diagnostic criteria used in various countries.
4. Variations in rates are the result of methodological factors.

## Phenomenology

Children normally go through a period when they have compulsive rituals. This is most prominent in two and three years olds<sup>(17,18)</sup>. These rituals do not interfere in the child's social functioning, nor are they experienced as foreign or unpleasant. They often occur at bedtimes, in the morning and at mealtimes<sup>(19)</sup>.

Childhood onset OCD has been documented as early as age two<sup>(20-21)</sup>. In NIMH (National Institute of Mental Health) a sample of 70% of consecutive patients, the mean age at onset was 10.1 (SD  $\pm$  3.52) years, it was found that males tend to have an earlier onset of symptoms than females (2.5 years). Also, they noted that onset is gradual and there is no history of obsessive traits in the majority of their group, nor had they exhibited any exaggeration of normal rituals during early childhood. Besides these rituals were more frequent than obsessions, obsessions dealt

primarily with contamination, danger to self or others, symmetry or moral issues. Combinations of rituals and obsessions was most common, and pure obsessions were rare compared with pure ritualisers<sup>(22)</sup>.

Washing rituals were by far the most common occurring symptoms during the course of illness in 85% of the patients. Also it is noted that hand washing is more common than showering<sup>(23)</sup>. In 90% of cases the symptoms had changed overtime. Most children began with a single obsession or compulsion at onset, continued with this for months or years, and then gradually acquired different thoughts or rituals<sup>(24)</sup>. During their school years counting and symmetry were common. Sexual thoughts of rituals become more common in late adolescence<sup>(24)</sup>. A life time history of repeating rituals was present in over one half of the samples, (n = 36, 51%)<sup>(25)</sup>. Many children would repeatedly draw a letter or a number until it was "perfect". Their teachers noticed the abrupt onset of erasure holes in their papers, where parents observed increasing amounts of time being spent going back and forth through a doorway (three times) or getting up from a chair twice. Or being as complicated as a young man spending a two hour long ritual of repeatedly getting in and out of the car, circling a tree in the front yard, checking the mail box, climbing the porch steps and entering and re-entering the house. If obsessive thoughts accompanied these rituals it was usually one of harm coming to self or loved one, and the rituals were necessary to neutralize the

## Introduction

The first publication relating to compulsions and associated phenomena was that of Esquirol<sup>1</sup>. The first formal definition of a compulsion was proposed by Schneider<sup>2</sup>. Several authors have extended and refined the definition given by Schneider, and the best of all is: "that a compulsion is a recurrent or persistent thought, image, impulse, or action, that is accompanied by a sense of subjective compulsion and a desire to resist it"<sup>3</sup>.

The early clinical description of Freud<sup>4</sup> mentioned children 5 and 11 years of age with classical presentation of the disorder. Systematic studies have confirmed that one third to one half of adult cases had their onset by age 15<sup>5</sup>.

## Epidemiology

The disorder presents itself rarely in the clinical population but does have a reported incidence rate of 1% in child psychiatric in-patients<sup>6</sup> and 2% of the total clinical population<sup>7</sup>. Recent data suggests that the disorder may be more common.

On the Isle of Wight<sup>8</sup> a survey of over 200 10-11 year old children was performed and no pure cases of O.C.D were described. A total of seven cases were seen with a mixed obsessive and anxiety features, an incidence of 0.3%.

Robins<sup>9</sup> using a structured interview DIS (Diagnostic Interview Schedule), found the life time prevalence rate was

1.9-3.3. Even when the other disorder where excluded the rate was 1.2-2.4%.

Mean age of onset is 20-25 years of age, with 50% developing symptoms in childhood or adolescence<sup>10</sup>. Further support for paediatric onset is given by Black<sup>11</sup>. The prevalence of O.C.D in a study by Flament<sup>12</sup>, was 1.0% in agreement with the Epidemiological Catchment Area (ECA) estimate for adults.

Whitaker<sup>13</sup>, used a two stage epidemiological strategy to estimate the lifetime prevalence of some psychiatric disorders in a county consisting of a wide secondary school population, numbering nearly 5,600 adolescents. Criteria used was based on DSM-III, and the Leyton Obsession Inventory Child Version was also used. OCD was found to occur in 1.9% of this non-referred adolescent population (lifetime prevalence rate). Only 40% of these had received mental health services from any source: 5% in hospital, 25% by a mental health professional, 15% by a general medical service provider, and 5% by a non-medical service provider.

Toro<sup>14</sup> in Barcelona found that the rate of OCD is 0.9% of the total population examined. Flament<sup>15</sup> conducted a study in France which revealed that the lifetime prevalence rate is 1.9% which is equal to the rate of prevalence observed in the U.S.

More recently<sup>16</sup>, it was discovered that the prevalence of OCD and subclinical OCD were 3% and 19% respectively.

It appears from reviewing the epidemiology that the prevalence rate in the U.S is up to 3%, which is higher

## Review Article

### Literature review on Obsessive compulsive Disorder in Children and Adolescents

Aishia Rahmatalla, Amjad Jumaian, Amer Hosin

اضطراب الوسواس القهري لدى الاطفال والمراهقين

"مراجعة"

عائشة رحمة الله، أمجد جميعان، عامر حسين

#### الملخص

بالرغم من الاعتقاد السائد منذ زمن طويل بأن الوسواس القهري عند الأطفال والمراهقين نادر الحدوث، إلا أن معظم الأبحاث التي أجريت خلال العشرة سنوات الماضية، أكدت بأن مدى انتشار هذه الحالات يصل إلى ما يقارب 3٪، وأن هذه الحالات تشابه مثيلاتها عند الكبار. لوحظ أيضاً أن الكبار الذين يعانون من الوسواس القهري قد بدأت معاناة ثلثهم أو نصفهم منذ الطفولة. تهدف هذه المراجعة الى تعرّف الوسواس القهري عند الأطفال والمراهقين من خلال التركيز على مدى انتشار هذه الحالات والأعراض والأسباب المحتملة التي أدت اليه وكذلك الى تعرّف طرق العلاج المختلفة.

#### ABSTRACT

It was thought that obsessive compulsive disorder in children is a rare disorder. But most of research conducted during the last 10 years, found that the prevalence rate is up to 3%, and that OCD in children and adults are the same. also it was found that one third to one half of adult subjects experience the onset of OCD in childhood and adolescence.

The aim of this review is mainly to focus on various information available in the literature about OCD in children and adolescents. The main focus will be on its epidemiology, phenomenology, aetiology and various treatment methods.

## Appendix 1

- (١) العمر ..... سنة
- (٢) الجنس □ ذكر □ أنثى
- (٣) المستوى التعليمي :
- (٤) الحي السكني :
- (٥) يمكن أن يعرف أن الشخص مصاب بعين حاسدة من خلال :
- \* \* \*
- (٦) الأعراض الجسدية التي يمكن عزوها للعين الحاسدة:
- \* \* \*
- (٧) الأعراض النفسية التي يمكن عزوها للعين الحاسدة :
- \* \* \*
- (٨) مشاكل أخرى يمكن عزوها للعين الحاسدة :
- \* \* \*
- (٩) علاج الأمراض الناتجة عن الإصابة بالعين الحاسدة يكون بـ :
- العلاج الطبي فقط □ العلاجات الشرعية الدينية فقط □ كلاهما
- (١٠) العلاجات الشرعية الدينية للإصابة بالعين الحاسدة هي :
- \* \* \*
- (١١) مصادر معلوماتك عن العين الحاسدة هي :
- \* \* \*

**Table (3)**  
**Physical Manifestations of the Evil Eye as Perceived by the Sample**

Features	Males = 125 No. (%)	Female = 160 No. (%)	Total = 285 No. (%)	P
Cold extremities	25 (20.0)	33 (20.6)	58 (20.3)	N.S.
Body hotness and sweating	27 (21.6)	31 (19.4)	58 (20.3)	N.S.
Headache	31 (24.8)	43 (26.9)	74 (25.9)	N.S.
Injuries	62 (49.6)	25 (15.6)	87 (30.5)	0.000
Impotence	42 (33.6)	8 (5.0)	50 (17.5)	0.000
Multiple Aches	34 (27.2)	41 (25.6)	75 (26.3)	N.S.
Dermatological disturbances	13 (10.4)	112 (70.0)	125 (43.8)	0.000
Menstrual disturbances	26 (20.8)	69 (60.0)	122 (42.8)	0.000
Others	20 (16.0)	18 (11.2)	38 (13.3)	N.S.

N.B. Responses are not mutually exclusive.

**Table (4)**  
**Psychological Disturbances Attributed to "The Evil Eye"**

Features	Males = 125 No. (%)	Female = 160 No. (%)	Total = 285 No. (%)	P
Weeping and Sadness	110 (88)	126 (78.7)	236 (82.8)	0.05
Fear and Phobia	36 (28.8)	33 (20.6)	69 (24.2)	N.S.
Social Isolation	72 (57.6)	105 (56.6)	177 (62.1)	N.S.
Loss of Interest	97 (77.6)	121 (75.6)	218 (76.4)	N.S.
Sleep disturbance	43 (24.0)	57 (35.6)	100 (35.0)	N.S.
Loss of Appetite	74 (59.2)	112 (70.0)	186 (65.2)	N.S.
Irritability	31 (24.8)	37 (23.1)	68 (23.8)	N.S.
Others	19 (15.2)	22 (13.7)	41 (14.3)	N.S.

N.B. Responses are not mutually exclusive.

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الرياض: ١١٤٨٥ ص ٢١٥٢٥

The Evil Eye

**Table (1)**  
**Demographic Data by Sex**

	<b>Males = 125</b> <b>No. (%)</b>	<b>Females = 160</b> <b>No. (%)</b>	<b>Total = 285</b> <b>No. (%)</b>
<b>Age (years)</b>			
Below 20	42 (33.6)	17 (10.6)	59 (20.7)
20 - 29	35 (28.0)	66 (41.3)	101 (35.4)
30 - 39	21 (16.8)	53 (33.1)	74 (26.0)
40 - 49	20 (16.0)	16 (10.0)	36 (12.6)
≥ 50	7 (5.6)	8 (5.0)	15 (5.3)
<b>Education</b>			
Illiterate	9 (7.2)	15 (9.4)	24 (8.4)
Primary School	13 (10.4)	42 (26.3)	55 (19.3)
Intermediate School	19 (15.2)	37 (23.1)	56 (19.6)
High School	48 (38.4)	43 (26.9)	91 (31.9)
University & Above	36 (28.8)	23 (14.3)	59 (20.7)

**Table (2)**  
**Criteria Used for Recognizing an Evil Eye - Caused Illness**

<b>Criterion</b>	<b>Males = 125</b> <b>No. (%)</b>	<b>Female = 160</b> <b>No. (%)</b>	<b>Total = 285</b> <b>No. (%)</b>	<b>P</b>
Absence of a clear medical diagnosis	63 (50.4)	80 (50.0)	143 (50.1)	N.S.
Poor response to medical treatment	40 (32.0)	52 (32.5)	92 (32.2)	N.S.
Faith-healer's judgment	57 (45.6)	89 (55.6)	146 (51.2)	N.S.
Personal judgment	50 (40.0)	53 (33.1)	103 (36.1)	N.S.

N.B. Responses are not mutually exclusive.

- Age, sex and educational status seem to play no great role in holding such misconceptions.
- Faith-healers are highly regarded and trusted, and their advice is usually taken unquestioned, that has led to a delay in diagnosing and treating psychiatric disorders.

## Recommendations

- Educating the general population, patients, and their relatives, about the psychiatric illnesses using media, lectures and seminars.
- Educating medical students, young graduates and community physicians about such misconceptions.
- Organizing the traditional medicine and facilitating mutually respective

relationship between psychiatrists and faith-healers.

- Further researches in this field are necessary.

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## References

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1. Ibn Hajjar, Fath Albari (In Arabic), Dar Al Marifah Book Sellers Lebanon Vol. 10 P. 199-205 (1970).
2. Altaibi O. (1991). The evil eye and it's treatment (Book in Arabic) Alturath Al Islami Book Sellers.
3. AlSubaie (1989) Psychiatry in Saudi Arabia: Cultural Perspective trans-cultural Psychiatric Research Review-26: 245-262.
4. Hussein F. (1991). A Study of the role of unorthodox treatments of psychiatric illness in Riyadh The Arab Journal of Psychiatry Vol. 2 No. 2: 170-184.
5. Al Subaie A. (1994). Traditional healing experiences in patients attending a university outpatient clinic. The Arab Journal of Psychiatry Vol. 5 No. 2: 83-91.
6. Daniel WW. Biostatistics: A foundation for analysis in health sciences ed4. New York John Wiley and sons 1987.
7. Abdel Gawad M. (1989). Knowledge of relatives of psychiatric patients about mental illness. The Arab Journal of Psychiatry Vol. 1:22-29.
8. Al Mahdi M. (1995). Traditional medicine: Advantages and Disadvantages (in Arabic), Annafs Almutma'annah No. 42: 19-22.
9. Morgan A.J. (1973). The practice of Mental health Nursing. A community Approach, J.B. Dippincott Co. Philadelphia: 181-182.

knowledge of psychological or emotional manifestations of psychiatric disorders.

Another explanation is projection as a defense mechanism exercised by the patients and their relatives as a method of avoiding psychological stresses that would result from acknowledging a psychiatric illness. By such a defense mechanism patients and their relatives lay blame on someone else (supernatural attributions, e.g. evil eye, possession, sorcery, .... etc.) projecting their problems onto an external influence, relieving their guilt feelings about the responsibility towards the illness and avoiding the stigma of mental illness and psychotropic medications. They are not aware that effective symptomatic treatment may be sued even if the definite diagnosis has not been reached. For example, painkillers, sedatives and anxiolytics.

Faith-healer's opinions and judgments seem to have a considerable influence that parallels a doctor's evaluation and assessment. This could be explained by the trust and confidence people have in faith-healers on a religious basis. This finding is supported by the finding of Al-Subaie that more than half of those who used traditional medicine still had to travel to see their healer despite most being semi-illiterate and lack no contemporary medical knowledge<sup>(9)</sup>. Such an attitude and practice is expected to lead to over-generalization in attribution both physical and psychological disturbances to the evil eye due to lack of scientific basis, and finally will lead to mismanagement of a great number of cases.

Interestingly most physical manifestations attributed to the evil eye were those

anxiety, such as cold extremities, body hotness, sweating and headaches. It is not surprising to find more males attributed impotence to the evil eye while more females attributed menstrual disturbances since these are gender related problems.

Around two-thirds considered religious-based treatment, (such as reading certain verses of the Koran onto the patient or on olive oil and asking the patient to wash the affected areas, (e.g., the chest in a case of chest tightness) as the only effective method in treating cases of the evil eye, as it is the only underlying cause behind the problem and should only be treated by religious methods whatever the effect/effects. This is slightly higher than the finding of Al-Subaie, who found that religious treatments were used in more than half, (56%) of the cases who attended the psychiatric clinic at a university hospital in Riyadh<sup>(9)</sup>.

Morgan and Moreno (1973) described how the treatment in Western countries, is delegated to the Shaman, witch-doctor or priest, who exercise mystical powers to treat and cure<sup>(9)</sup>.

## Conclusions and Limitations

A large well-designed study with representative samples is needed to confirm the findings of the present study. Nonetheless, these findings led us to the following tentative conclusions and suggestion:

- The study shows some misconceptions about psychiatric disorders particularly depression and anxiety.



Only 4% were prepared to consider medical treatment for problems attributed to the evil eye but 34% considered combining both medical and religious-based treatments.

The remainder (62%) considered only religious based treatments. With regard to the source of information about the evil eye, one third of the sample acquired such knowledge from lectures, books and tapes which are products of faith-healers, most of whom are illiterate or semi-illiterate, whereas two thirds became aware of the evil eye from social encounters and prior personal experiences.

There was no correlation in either sex between age and physical or psychological manifestations attributed to the evil eye.

Educational status does not seem to correlate with criteria used for recognizing evil eye- caused illnesses in either sex.

## Discussion

The recognition of the early manifestations of mental illness by the patients and their relatives is of great importance in seeking early treatment of Psychiatric disorders. Concepts of the evil eye, jinni possession and witchcraft are widely accepted in Saudi society<sup>(4,5)</sup>, which may be explained by the great effect as religion has a dominant position and influence in Islamic countries. In Egypt for example envy and evil eye were reported as causes of mental illness by approximately 55% of patient's relatives<sup>(7)</sup>. The lack of clear medical etiology and poor responses to medical treatment were used by our subjects to indicate an evil

eye. This could be explained by poor medical and psychiatric knowledge in the light of which alternative explanations can easily be accepted. For example a poor response to medical treatment may be due to subtherapeutic doses or non-compliance with treatment.

As regards the diagnosis, some patients and patient's relatives think that the clinician has not reached a definite diagnosis just because he has not informed them about it or because he keeps asking for further investigations. These finding are supported in part by the study of Abdul Gawad who found that 47.33% of the accompanying family members had poor knowledge about the patient's diagnosis<sup>(7)</sup>.

One limitation of this study is that the participants may not be representative of their respective population; there is a possibility of bias in the selection of the participants. Nonetheless, the data obtained revealed some of the trends in thinking and perception of a not insignificant number of the population.

The finding that more males attributed accidents and injuries to the evil eye whereas more females attributed dermatological problems could be explained on a psychological basis, as males are usually more concerned with illnesses that threaten their physical health, for example accidents and injuries, whereas females tend to be more concerned with their appearance and beauty.

Most of the psychological disturbances attributed to the evil eye were those of depression, anxiety and phobic symptoms. This could be explained by poor

2. Physical manifestations attributed to the evil eye.
3. Psychological disturbances attributed to the evil eye.
4. Other problems could be inflicted by the evil eye.
5. Whether to consider medical or religious-based treatments for problems attributed to the evil eye.
6. Religious treatment for problems attributed to the evil eye.
7. The source of information about the evil eye (see Appendix 1).

### Sampling Method

A multistage sampling method was conducted. The questionnaires were distributed into five groups of subjects according to the five geographical areas of Riyadh City. Only Saudi nationals were included in the study. A quota sampling method was adopted to represent the two genders, the age groups and education levels.

### Data Collection

The data collection period lasted for 12 weeks. Five research assistants were employed and each was assigned to one geographical area of the city. Non-responders were remedied and encouraged to fill in the questionnaires. Questionnaires that had unreliable answers or missing the essential questions were excluded, ending with an overall 57% response rate.

### Statistics and Analysis

The data was entered using data star programme and analysed with Systat Statistic Package in a PC microcomputer.

Chi-Square with Yates Correction<sup>(6)</sup> was used to assess the significance of association between two variables; P-value of less than 0.05 was considered as significant.

### Results

Age and educational levels are listed in table (1). The mean age was 32.3 ( $\pm$  9.4) years, with a range of 16 to 63.

As shown in table (2) the evil eye was recognized most by absence of a clear physical illness, a poor response to medical treatment as well as by faith-healers and personal convictions. There was no statistically significant difference between males and females with regard to these variables.

Physical manifestations of the evil eye as perceived by the sample are listed in table (3). Significantly, more males attributed injuries ( $X^2 = 36.61$ ,  $P < 0.001$ ) and impotence ( $X^2 = 37.73$ ,  $P < 0.001$ ) to the evil eye, whereas significantly more females attributed dermatological ( $X^2 = 98.83$ ,  $P < 0.000$ ), and menstrual ( $X^2 = 42.62$ ,  $P < 0.001$ ) disturbances to such an affliction.

Table (4) depicts the psychological disturbances attributed to the evil eye, most of which are features of depression, anxiety, as well as phobic symptoms, with no statistically significant difference between males and females.

Two additional problems were attributed to the evil eye: academic or career failure and marital discord, but no statistically significant difference was found between the two sexes.

about public knowledge and understanding of the evil eye. A self-administered questionnaire was distributed to a random of 500 Saudi individuals from the five areas of Riyadh City (KSA). Two hundred and eighty five individuals responded (57%), 160 females and 125 males. Responders seemed to have acquired their knowledge about the evil eye from multiple sources, including social encounters, prior personal experiences, books and tapes. Judgment of patients and faith healers, absence of clear physical causes and poor responses to medical treatment were the main reasons to attribute a certain illness to the evil eye. Most symptoms attributed to the evil eye were those of depression and anxiety. Significantly more males attributed injuries and sexual dysfunctions to the evil eye, whereas more females attributed dermatological and menstrual disturbances. The study emphasizes the importance of public education about the causes, manifestations and treatment of psychiatric disorder. Further studies in this field are necessary.

## Introduction

Poor knowledge and misconceptions about psychiatric illnesses may be a potential barrier that prevents people from seeking well-timed help for their psychological problems. The evil eye is recognized in Islam as a cause of ill health, narrated Aisha (the wife of Prophet Mohammad): "The Prophet, peace be upon him ordered me to do Ruqya (if there was danger) from an evil eye".... (Sahih Albukhari), but no specific physical or psychological disorders were mentioned in the Islamic literature to be caused by evil eye<sup>(1)</sup>. This has made it easy for faith-healers to introject their personal understanding, views and speculations over the centuries. Certain disorders are more likely to be attributed to the evil eye than others, especially those with no medical explanation or curative treatment and those of psychological origin<sup>(2)</sup>. Most cases that seek help from traditional healers are

found to be psychological in nature, or chronic non-specific physical ones<sup>(3)</sup>. About 80% of Saudi psychiatric patients would consult a traditional healer at sometime during their illness, and 53% would do so before seeing a psychiatrist<sup>(4,5)</sup>.

This study was initiated to gather information about public knowledge and understanding of the evil eye and its association to physical or /and psychiatric disorders.

## Method

The study is based on an eleven item self-composed questionnaire. It includes questions on the demographic data (age, sex, and education) in addition to seven items of the person's perception of the evil eye concept:

1. Criteria used for recognizing an evil eye - caused illness.

## Public View of the "Evil Eye" and its Role in Psychiatry A Study in Saudi Society

Mohammad A. Alsughayir

النظرة الاجتماعية الى الإصابة بالعين الحاسدة ودورها في الطب النفسي

دراسة في المجتمع السعودي

محمد الصغيّر

### المخلص

تعد الكين الحاسدة واحدة من أهم الأسباب التي تعزى إليها الأمراض، خاصة في البلدان الاسلامية. هدفت هذه الدراسة الى جمع معلومات حول معرفة وفهم أفراد المجتمع السعودي لمفهوم العين الحاسدة. تم توزيع ٥٠٠ استبانة على أفراد سعوديين (٢٥٠ للذكور و ٢٥٠ للإناث) في الأجزاء الخمسة لمدينة الرياض (السعودية)، وتم جمع ٢٨٥ استجابة (٥٧٪ من الاستبانات) - ١٦٠ من الإناث و ١٢٥ من الذكور.

اتضح أن معلومات المستجيبين المتعلقة بالعين كانت من خلال عدة مصادر تشمل اللقاءات الاجتماعية، والخبرات الشخصية السابقة، والكتب والاشربة. أهم العوامل الدافعة الى عزو الأمراض الى عين حاسدة تكمن في رأي المريض والمعالج بالرقية، وغياب الأسباب العضوية للمرض وضعف الاستجابة للعلاج الطبي. فقد اتضح أن معظم الأعراض المعزوة الى العين الحاسدة كانت أعراضاً اكتئابية أو أعراض قلق. واتضح، بفوارق إحصائية دالة، أن الذكور أكثر عزواً للإصابة الجسدية والضعف الجنسي الى العين من الإناث، بينما كانت الإناث أكثر عزواً منهم للعين في مجالي الإصابات الجلدية واضطرابات الطمث. تؤكد هذه الدراسة أهمية تعليم المجتمع وتوعيته بالأمراض النفسية، أسبابها وأعراضها وعلاجاتها، كما تشجع الدراسة المزيد من البحوث في هذا الميدان.

### ABSTRACT

The "evil eye" concept is one of the traditional ill health attributions, particularly in the Islamic countries. This study aimed at gathering information

**Table (4)**  
**Extrapyramidals, Tardive Dyskinesia, and Psychopathology in Artane Abusers and in Treatment - and Diagnosis Matched Non-Abusers**

	Artane Abusers n = 30		Non-Artane Abusers n = 90		p value
	Mean	SD	Mean	SD	
Simpson and Angus scale total score	1.6	3.01	1.29	2.65	.2920*
AIMS score	1.1	1.64	.74	1.34	.1157*
BPR Scale total score	34.33	16.32	37.54	19.56	.2100*
Depressive symptom score	17.76	.97	20	3.8	.0855*
Positive symptom score	29.4	22.52	25.55	18.28	.2809*
Negative symptom score	19.93	4.97	47.61	22.4	.0039**

\* Non-significant, \*\* Significant.

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Trihexyphenidyl Abuse

**Table (3)**  
**Extrapyramidals, tardive dyskinesia, and psychopathology in Artane and in Treatment - and Diagnosis Matched Non-Abusers**

	<b>Abusers n=30</b>	<b>non- abusers n=90</b>	<b>X<sup>2</sup></b>	<b>p value</b>	<b>odds ratios</b>
<b>Extrapyramidals</b>					
Present	7	18	.15	.697	1.27,4<OR<3.61
Absent	23	72			
<b>AIM Scale [TDs]</b>					
Present	10	23	.68	.408	1.46,5.4<OR<3.88
Absent	20	67			
<b>BPR Scale</b>					
<b>Negative symptoms</b>					
Present	5	26	1.75	.185	.49,.15<OR<1.55
Absent	25	64			
<b>Positive symptoms</b>					
Present	5	15	2.5	.1138	2.14,.74<OR<6.17
Absent	21	75			
<b>Depr. Symptoms</b>					
Present	6	20	.798	.798	.88,.28<OR<2.67
Absent	24	70			

**Table (2)**  
**Clinical Parameters of Artane and Non-Artane Abusers**

<b>Variables</b>	<b>Abusers n = 30</b>	<b>Non- abusers n = 90</b>	
<b>H/O Drug Abuse**</b>			
Positive	23	27	$X^2 = 20.16, df = 1,$ $p < 0.005$
Negative	7	63	
<b>H/O Family Ment Dis. **</b>			
Positive	18	21	$X^2 = 13.79, df = 1,$ $p < 0.005$
Negative	12	69	
<b>PMP</b>			
Schizoid	16	62	$X^2 = 02.39, df = 1, p > 0.05$
Non-Schizoid	14	28	
<b>Duration of drug tt*</b>			
Mean $\pm$ SD	9.06 $\pm$ 3.78	8.2 $\pm$ 4.8	$t = 0.89, p = 0.187$
<b>Duration of Use of Artane*</b>			
Mean $\pm$ SD	8.26 $\pm$ 3.35	7.06 $\pm$ 3.51	$t = 1.46, p = 0.0519$

\*\* Significant. \* In years.

Trihexyphenidyl Abuse

**Table (1)**  
**Sociodemographic features of Artane Abusers and Non-abusers**

<b>Variables</b>	<b>Abusers n = 30</b>	<b>Non-abusers n = 90</b>	
Current Age [in yrs] Mean + SD	33.83 + 7.4	40.26 + 12.29	t = 2.7, p> 0.05
Sex			
Male	25	80	X <sup>2</sup> = 0.64, df = 1, p> 0.05
Female	5	10	
Marital Status **			
Evermarried	16	68	X <sup>2</sup> = 5.29, df = 1, p<.02
Unmarried	14	22	
Occupation **			
Employed	6	42	X <sup>2</sup> = 6.67, df = 1, p<0.005
Unemployed	24	48	
Residence			
Urban	22	72	X <sup>2</sup> = 0.59, df = 1, p>0.44
Rural	8	18	
Family Type			
Joint	23	75	X <sup>2</sup> = 0.67, df = 1, p>0.41
Nuclear	7	15	
Education			
Literate	25	70	X <sup>2</sup> = 0.42, df = 1, p>0.52
Illiterate	5	20	
Social Class			
Low	19	68	X <sup>2</sup> = 1.69, df = 1, p>0.194
Upper	11	22	
Smoking **			
Smokers	27	58	X <sup>2</sup> = 7.11, df = 1, p<.005
Non-smokers	3	32	
Stresses			
Present	26	69	X <sup>2</sup> = 1.36, df = 1, p>0.24
Absent	4	21	

\*\* significant



9. Davis JM. Comparative doses and costs of antipsychotic medication. *Arch J Psychiatry* 1976;33:857-861.
10. Nestoros JN, Lehman HE, Ban TA. Neuroleptic drugs and sexual function in schizophrenia. *Modern problems in Pharmacopsychiatry* 1980;15:111-130.
11. WHO Heads of centres collaborating in WHO-co-ordinated studies on biological aspects of mental illness. Prophylactic use of anticholinergics in patients on long-term neuroleptic treatment. A consensus statement. *Br J Psychiatry* 1990;156:412.
12. Chien CP, DiMascio A, Cole JO. Antiparkinsonian agents and depot phenothiazine. *Am J Psychiatry* 1974;131:86-89.
13. Keepers GA, Clappison VJ, Casey DE. Initial anticholinergic prophylaxis for neuroleptic induced extrapyramidal syndromes. *Arch Gen Psychiatry* 1983;40:1113-1117.
14. Lavin MR, Rifkin A. Prophylactic antiparkinson drug use: II withdrawal after long-term maintenance therapy. *J Clin Pharmacol* 1991;31:769-777.
15. DiMascio A, Demirgian E. Antiparkinson drug overuse. *Psychosomatics* 1970;11:596-601.
16. Qureshi NA. Benztropine-induced psychosis: is it a toxic psychosis or an aggravation in the direction of schizophrenia? *Saudi Pharmaceut J* 1995;3:68-70.
17. Casey DE. Managing tardive dyskinesia. *J Clin Psychiatry* 1978;39:748-753.
18. Hirata I, Oda K, Kuroda Y, Shibasaki H. Trihexphenidyl [THP]-induced respiratory dyskinesia. *Rinsho Shinkeigaku* 1986;26:109-114.
19. Yassa R, Lal S, Korpassy A, Ally J. Nicotine exposure and tardive dyskinesia. *Biol Psychiatry* 1987;22:67-72.
20. Binder RL, Kazamatsuri H, Nishimura T, McNeil DE. Smoking and tardive dyskinesia. *Biol Psychiatry* 1987;22:1280-1282.

might further bias our results. nonetheless, we found some significant sociodemographic parameters associated with Artane abuse, as reported by other researchers. We also demonstrated that previous experience with multiple drugs of abuse and their concurrent abuse, a positive history of mental disorders in the family, and lesser negative psychopathology were significantly associated with Artane abuse. We failed to elicit the effect of this abuse on various EPS and so on depressive and positive symptomatology, which is consistent with the findings of other researchers.

In summary, we suggest that patients with psychoses who are characterized by some predisposing socioclinical features, as found in this research, should be prescribed Artane in a most judicious

manner, so that iatrogenic abuse could be prevented. We also feel that further studies should be carried out to explore the unseen factors which lead to the development of this abuse in functional psychotic patients. Similarly the possible therapeutic effect of Artane on negative psychopathology, as evidenced in our study, need replication research, which should recruit a homogenous schizophrenic population.

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### References

1. Tandon R, Shipley JE, Greden JF, Mann NA, Eisner WH, Goodson J. Muscarinic cholinergic hyperactivity in schizophrenia: relationship to positive and negative symptoms. *Schizophr Res* 1991;4:23-30.
2. Saran AS. Use or abuse of antiparkinsonian drugs by psychiatric patients. *J Clin Psychiatry* 1986;47:130-132.
3. Goff D, Baldessarini R. Drug interactions with antipsychotic agents. *J Clin Psychopharmacol* 1993;13:57-67.
4. Vagen, R. Gotestam KG. An experimental evaluation of the euphoric properties of antiparkinson drugs on psychotic patients. *Acta psychiatr Scand* 1986;74:519-523.
5. Qureshi NA. Trihexyphenidyl (Artane) abuse among Saudi psychiatric patients. *Annals of Saudi Medicine* 1992;12:391-394.
6. Goff DC, Amico E, Dreyfuss D, Ciraulo D. A placebo-controlled trial of trihexyphenidyl in unmedicated patients with schizophrenia. *Am J Psychiatry* 1994;151:429-431.
7. Qureshi NA, Hegazy IS. Trihexyphenidyl abuse and Munchausen's syndrome. *Indian J Psychiatry* 1993;35:178-188.
8. McInnis M, Petursson H. Trihexyphenidyl dependence. *Acta Psychiatr Scand* 1984;69:538-42.

disorders might contribute to the development of trihexyphenidyl abuse. Our current analysis of large and matched controlled data supported the latter two presumptions. Prolonged exposure to Artane was found to be a weak risk factor for abuse of the drug. Further, our study found that negative symptoms were significantly fewer among Artane abusers, which is consistent with the hypothesis of correction of hypercholinergic state by anticholinergics, which also improve the negative psychopathology<sup>(1)</sup>.

In the light on this and other reviewed studies, two practical issues of greater clinical relevance though not directly addressed by our study, need special emphasis. First, is it a scientifically sound practice to prescribe anticholinergics for patients with functional psychoses for such a lone time? Second, what are anticholinergic drugs' effects on chronic extrapyramidal syndromes? At admission for a first psychotic breakdown in certain vulnerable patients<sup>(21)</sup>, the short-term prophylactic use of anticholinergic drugs for the prevention of acute dystonia is recommended<sup>(22)</sup>; otherwise, it is not a standard approach and is a controversial strategy<sup>(23,24)</sup>. Despite the prophylactic use of anticholinergics, about 8 to 20% patients develop EPS<sup>(25)</sup>, but the majority of them improve with either lowering or modification of the antipsychotic dosages. Those psychotic patients with risk factors [male sex, young and elderly patients, and those on a high-potency antipsychotics] who continue to manifest EPS reasonably need at least 3 months, anticholinergic treatment<sup>(26)</sup>. Subsequently on follow-up

visits, a trial of anticholinergic drug withdrawal would give further guidance on whether or not to continue antiparkinson drugs<sup>(27)</sup> on long-term basis. Between 10 and 60% of patients develop EPS when anticholinergics are withdrawn<sup>(26,28)</sup>. At the same time, it is prudent to assess patients with psychoses repeatedly so as to administer the minimal antipsychotic maintenance doses which do not entail the use of those drugs which are associated with adverse side-effects<sup>(29)</sup>.

Our study statistically did not find the significant presence of EPS and tardive dyskinesia among Artane abusers, as compared to non-abusers. However, the abusers were using significantly high doses of Artane, compared to non-abusers. It has been reported that antiparkinson drugs uncover, exacerbate, or induce the emergence of tardive dyskinesia among psychiatric patients treated with neuroleptic drugs<sup>(30,31)</sup>. In that case, Artane abusers, who were taking higher doses, should have a significantly greater prevalence of tardive dyskinesia. This was not the case in this research. It is known that the development of acute EPS predicts the future emergence of tardive dyskinesia. The relationship between smoking and tardive dyskinesia appears to be complex, as some studies have reported increased movement disorders in smokers compared with non-smokers<sup>(32,33)</sup>.

The findings of our research should be interpreted with caution because the process of matching with a control group produced a sampling bias which might have influenced our results. Having a diagnostically heterogeneous sample

abusing such drugs [ $X^2=15.788$ ,  $df=1$ ,  $p<.0005$ ].

## Discussion

In our descriptive study of 14 patients with iatrogenic trihexyphenidyl abuse, we found that the majority were ever-married and unemployed young male adult smokers, who came from families with low education, poor social class, high psychosocial stresses, and of urban background<sup>(5)</sup>. In the present study, when similar sociodemographic variables were analysed between Artane abusers and matched non-abusers, only three parameters including unemployment, smoking, and marital status were significantly associated with the abuse. The results of our research are in consistent with others<sup>(15)</sup>. However, we cautiously propose that these findings, in particular the unemployment and marital breakdowns, might be the adverse social consequences of Artane abuse. Alternatively, it is not ruled out from this study that these socially disadvantageous and stressful conditions were contributing to the dimension of the abuse. Notably, the significant association with smoking [90%] is of serious concern. In one study of institutionalized schizophrenic patients, we found that 92% of the men and 82% of the women smoked<sup>(16)</sup>. Smoking, preceded by drinking beer or wine, may herald the progression of dependence on other dangerous drugs like marijuana and opioids<sup>(17)</sup> and is associated with a variety of serious medical disorders including cancers. About 65% of Artane non-abusers were also smokers. Therefore

mental health professionals, in liaison with anti-smoking campaigners, should devise relevant strategies for reducing the psychosociomedical hazards of smoking among mental patients. Other clinical implications of smoking in psychiatric patients, for example those with schizophrenia and mood disorders, have been reported<sup>(18,19)</sup>. The latter study in particular highlighted nicotine's dopamine release augmentation in the nucleus accumbens, through firing of the ventral tegmental dopamine cells. The excitatory activity in this dopamine reward system is reflected in the diminution of negative symptoms of schizophrenia.

As regards the clinical parameters, previous experience with multiple substances of abuse, a positive family history of mental disorders including drug abuse, prolonged use of antipsychotic drugs and Artane, schizoid personality constitution, chronic psychopathology, and the relatively modest presence of EPS characterized the abusers, as highlighted in our previous research<sup>(5)</sup>. But this controlled investigation revealed that previous experience with and concurrent irregular use of multiple substance abuse, a positive family history of different mental disorders including drug abuse, and minimum negative psychopathology were found to be significantly associated with Artane abuse. Some of these findings have also been substantiated by other researchers<sup>(20)</sup>. Previously, we hypothesized that prolonged and exorbitant use of antipsychotics and Artane, exposure to other substance of abuse, and a genetic loading of mental

parameters significantly associated with abusers were ever-married [ $X^2=5.29$ ,  $df=1$ ,  $p<0.02$ ], being unemployed [ $X^2=6.67$ ,  $df=1$ ,  $p<0.005$ ] and smoking [ $X^2=7.11$ ,  $df=1$ ,  $p<0.005$ ].

**Clinical Parameters:**

The clinical variables are shown in table 2. Previous experience with multiple drugs of abuse [ $X^2=20.16$ ,  $df=1$ ,  $p<0.005$ ] and positive family history of psychiatric disorders [ $X^2=13.79$ ,  $df=1$ ,  $p<0.005$ ] were significantly associated with Artane abusers. Whereas the premorbid personality type [ $X^2=2.39$ ,  $df=1$ ,  $p<0.05$ ] and duration of antipsychotic treatment [mean  $\pm$  sd=9.06+3.78 abusers vs 8.2+4.8 non-abusers,  $t=0.89$ ,  $p=.187$ , n.s.] were not significantly associated with Artane abusers. however, there was a weak significant trend of duration of Artane use [mean  $\pm$ sd=8.26+3.35 abusers vs 7.06+3.51 non-abusers,  $t=1.64$ ,  $p=0.05$ ] in abusers.

**EPS, tardive dyskinesia, and psychopathology:**

In table 3, it was shown that EPS [ $X^2=.15$ ,  $df=1$ ,  $p=.697$ , n.s.] tardive dyskinesia [ $X^2=.68$ ,  $df=1$ ,  $p=.408$ , n.s.] and BPRS subscales, i.e. negative [ $X^2=1.75$ ,  $df=1$ ,  $p=.185$ , n.s.], positive [ $X^2=2.5$ ,  $df=1$ ,  $p=.1138$ , n.s.] and depressive symptoms [ $X^2=.065$ ,  $df=1$ ,  $p=.798$ , n.s.] were not significantly associated with Artane abusers. Similarly the computation of odds ratios as depicted in this table did not show any significant results. About 33.3% of non-abusers [ $n=23$ ] were manifesting such dyskinesias when they were assessed by AIMS. Among patients with Artane abuse with tardive dyskinesia, 2 patients presented

with mild [4 score], 3 patients with moderate [9 score] and 5 patients with severe [20 score] dyskinesia. On the other hand, from control group, 8 patients presented with mild [16 score], 9 patients with moderate [27 score] and 6 patients with severe [34 score] dyskinesia. Severity, i.e. mild, moderate [pooled], and severe, of tardive dyskinesia did not differentiate between abusers and non-abusers [ $X^2=1.86$ ,  $df=2$ ,  $p>0.39$ ]. When these domains were analysed by using one-sided t-test, only negative symptoms scores were significantly associated with non-Artane abusers [ $p=.0039$ ], as shown in Table 4.

**Other psychotropic medications:**

Additionally both group of patients were taking drugs other than antipsychotics and Artane. The abusers were taking very high doses of Artane [mean  $\pm$  sd=23.17+14.45, range=6-48], while non-abusers were taking normal doses [mean  $\pm$  sd=3.28  $\pm$ 1.51, range=1-6,  $p=.0000$ ]. Seven patients [ $n=7$ , 7.8%] from the control group, but none from among the Artane abusers, were taking lithium combined with antidepressants and antipsychotics in low doses. Five patients [16.7%] from the Artane group, compared with 16 [17.8%] from the control group were receiving a combination of antidepressants and low doses of antipsychotic drugs, especially thioridazine. 53% of Artane abusers [ $n=16$ ] were also concurrently abusing other drugs including locally produced beverages, amphetamines, benzodiazepines, spasmocibalgin, and phenergan on irregular basis. However, 16.7% of patients [ $n=15$ ] from control group were

to 7-extremely severe] has 18 items [minimum score 7 to maximum score 126] and for the purpose of this research, we subdivided these items into: (a) depressive symptoms [depressive mood, somatic concern, anxiety, tension and guilt feeling]; (b) positive symptoms [mannerisms and posturing, grandiosity, hostility, suspiciousness, hallucinations, uncooperativeness, unusual thoughts and conceptual disorganization, excitement]; and (c) negative symptoms [emotional withdrawal, motor retardation, and blunted affect]. On clinical grounds none of the patients presented with symptoms of disorientation. The Abnormal Involuntary Movement Scale (AIMS)<sup>(12)</sup> was used to identify the EPS in particular tardive dyskinesia, in Artane abusers and selected matched patients. The AIMS assesses the movement disorders [from 0-none to 4 severe] affecting face, lips, jaw, tongue, upper and lower extremities, and trunk, hence evaluating 7-body areas. It also evaluates the global severity [0-none/normal to 4-severe] of abnormal movements, incapacitation due to abnormal movements [0-none/normal to 4-severe], and patient's awareness of abnormal movements [0-none/normal to 4-severe]. None of the patient with tardive dyskinesia showed any dental problems or used dentures at the time of applying AIMS. We followed the criteria set by Jeste and Wyatt for determining the presence of tardive dyskinesia, i.e., a minimum AIMS score of 2 [mild] for one body area<sup>(13)</sup>. We also used Simpson and Angus Scale for identifying the extrapyramidal side-effects<sup>(14)</sup>; this 10-item has a minimum score 0 to maximum score

40. The body regions under assessment are arm, shoulder, elbow, wrist, leg, and head. Further, in addition to glabella tap-induced eye blinking, tremors and salivation were recorded; we also clinically evaluated the patients for dystonia, akathisia, and rabbit syndrome. A check-list of different psychosocial stressors was also prepared and each patients was asked to answer whether or not stressors were present in the year preceding the current evaluation. The stresses explored were related to occupation, family, finance, bereavement, legal, and residence. For personality evaluation DSM-III-R criteria were applied to all patients, abusers and non-abusers. The statistical tests of significance used in this study were chi square for categorical variables and one-sided t-test for continuous parameters. We also calculated odds ratio for determining some of the relative risk factors for the development of Artane abuse. The p value was considered significant at <0.05.

## Observations

### Sociodemographic Parameters:

Table 1 showed the sociodemographic features of Artane abusers and non-abusers. It was evident that age at index interview was not significantly different between the two groups [mean  $\pm$  sd = 33.83  $\pm$  7.4 abusers vs 40.26 $\pm$ 12.29 non-abusers,  $t=2.7$ ,  $p>0.05$ ] and so the dichotomized parameters including gender, type of residence, family constitution, educational background, social class, and stressful events. Contrastingly, the demographic

extrapyramidal syndromes (EPS) in these populations.

## Material and Methods

The sample of this study drawn from the out-and in-patient departments of Buraidah Mental Health Hospital, Al-Qassim, Saudi Arabia, comprised 30 patients [male = 28, 93.3%, female = 2, 6.7% having schizophrenia [n=21], mood disorders [n=8], and factitious disorder [n=1] who were identified abusing trihexyphenidyl. The characteristics of 14 of these Artane abusers have been described elsewhere<sup>(6)</sup>. Similarly, the features of a single female patient with Munchausen's syndrome included here were reported elsewhere<sup>(7)</sup>. Further, over a period of 3 years, we identified 16 more patients who demonstrated the features of trihexyphenidyl abuse. The axis I diagnoses of trihexyphenidyl abusers [n=30] as categorised above, were made by using DSM-III-R criteria. They were abusing Artane on an irregular basis; the daily dose in milligrams was very high. The operationalized criteria for the diagnosis of trihexyphenidyl abuse were as follows: 1) the persistent use of high doses of Artane for more than 6 months, not indicated for controlling EPS symptoms; 2) exploratory behaviour for seeking trihexyphenidyl; 3) repeated demands for refilling prescriptions only for trihexyphenidyl, i.e., singling out only Artane out of psychotropic drugs; 4) abnormal/complicated behaviour e.g. simulating EPS, aggressive spells, and threatening attitudes towards staff for getting trihexyphenidyl; 5) apparent

abstinent/withdrawal symptoms<sup>(8)</sup> e.g. multiple body pains, palpitations, lack of attention and concentration, letharginess and feeling of tiredness, irritability, restlessness, aggression, discomfort, craving, isolation, and anxiety, 6) feeling of euphoria and relief from these symptoms once the trihexyphenidyl was reintroduced; and 7) presence of tolerance for the drug.

This group of patients with Artane abuse was compared with 90 patients [male = 84, 93.3%, female = 6, 6.7%], who were matched both for the diagnosis and treatment. The treatment matching was done by converting the different psychotropics each patient was receiving at the time of index interview to equivalent doses of chlorpromazine [ $\pm$  25 chlorpromazine] by standard method<sup>(9)</sup>. The equivalent dose of long-acting was calculated according to the formula of Nestoros et al [25 mg fluphenazine Dec. im/2weeks=300 mg chlorpromazine/day<sup>(10)</sup>]. The diagnostic break-up of the control group similarly recruited from the out-and in-patient departments of Buraidah Mental Health Hospital who also met DSM-III-R criteria was as follows; schizophrenic disorder [n=63], mood disorder [n=24], and factitious disorder [n=3]. At the time of index interview, none of them met the aforesaid criteria for Artane abuse, but they were prescribed the drug in low doses. Each patient was assessed by a single rater [NAQ].

The Brief Psychiatric Rating Scale (BPRS)<sup>(11)</sup> was used for assessing the psychopathology of both groups of patients. This 7-point scale [1-not present

tardive dyskinesia did not differentiate the two groups. Artane abusers, when compared with non-abusers, were significantly less characterized by negative psychopathology. However, other psychopathological domains including depressive and positive symptoms did not differentiate between abusers and non-abusers.

**Conclusions:** The patients having these socioclinical profiles tend to develop trihexyphenidyl abuse. Psychiatrists should not prescribe trihexyphenidyl indiscriminately and for a long time to such patients, who indeed require long-term antipsychotic maintenance medications.

## Introduction

The anticholinergic agents are used for the treatment of neuroleptic-induced extrapyramidal syndromes in psychiatric patients. These compounds have also been reported to improve the negative and depressive symptoms of schizophrenia<sup>(1)</sup>. Additionally, anti-cholinergic drugs are used by certain schizophrenic patients for deriving benefit for chronic covert extrapyramidal symptoms<sup>(2)</sup>, though researchers have failed to substantiate all these later therapeutic benefits of anticholinergic drugs<sup>(3,4)</sup>. Besides having many therapeutic benefits in a variety of other clinical conditions, these drugs are associated with multiple adverse effects, including the liability to produce abuse/dependence<sup>(5)</sup> which is usually attributed to certain psychopharmacological properties, particularly its euphorogenic, effects. Despite these multiple proposed mechanisms, it is yet not clear what are the most probable factors which preferentially predisposed only certain psychiatric patients to abuse anticholinergic medications.

Previously, we have briefly reviewed the literature on trihexyphenidyl abuse and also described in an uncontrolled fashion the sociodemographic and clinical factors of this abuse in 14 psychiatric patients<sup>(6)</sup>. In continuation with this research, we further identified 16 more patients who satisfied our operationalized criteria for diagnosing trihexyphenidyl abuse. Though there has been an increasing interest to explore the characteristic features of anticholinergic/trihexyphenidyl uses and abuses, a review of the relevant literature did not find any diagnostic criteria for trihexyphenidyl abuse. Even the major classificatory systems like DSM-III-R, DSM-IV and ICD-10 do not provide any definite criteria. Likewise the researchers suggested that the various therapeutic aspects of trihexyphenidyl use in schizophrenic patients should be explored<sup>(6)</sup>. Therefore, there is further need to explore various biopsychosocial factors associated with trihexyphenidyl abuse. We designed this controlled study in an attempt to find out the socioclinical factors associated with trihexyphenidyl abuse and also document the prevalence of



## **Trihexyphenidyl Abuse: A Controlled Investigation Between Users and Misusers**

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سوء استعمال ترايهكسيفينيديل : دراسة ضابطة

نسيم قريشي، علاء الدين العمري، مزامل عبد القادر، عصام الحركة

### **المخلص**

الهدف: تهدف هذه الدراسة التعرف على العوامل السريرية والاجتماعية التي تؤدي الى سوء استعمال العقار. كما توثق الأعراض فوق الهرمية في المرضى الذين يسيئون استعمال العقار. وقد دلت الدراسة على أن الذي أساءوا استعمال العقار من الذين لم يتزوجوا وعاطلين عن العمل والمدخنين ومن الذين يسيئون استعمال العقاقير وهناك سيرة للمرض النفسي. أما الشخصية السابقة للمرض والضغط النفسية والأعراض الفوق هرمية فلم تميز بين المجموعتين. وتوصي الدراسة بعدم استعمال العقار المشار إليه بشكل غير مدروس ولفترات طويلة لهؤلاء المرضى الذين يحتاجون الى مضادات الذهان لفترات طويلة.

### **ABSTRACT**

**Objective:** This controlled study aim to identify the socioclinical factors predisposing psychiatric patients to misuse trihexyphenidyl and to document the extrapyramidal features in both trihexyphenidyl (Artane) abusers and non-abusers. **Method:** Thirty patients [n=30] with mainly two major functional psychoses and abusing trihexyphenidyl were compared with ninety Artane non-abusers patients [n=90] who were matched both for the diagnosis and treatment. Besides detailed clinical interview, each patient was assessed by using DSM-III-R criteria, Brief Psychiatric Rating Scale, Simpson and Angus Scale, and Abnormal Involuntary Movement Scale. **Results:** Comparatively, trihexyphenidyl abusers were significantly characterized by being ever-married, unemployed, smoking and having past and concurrent history of multiple drug abuse, and genetic loading of mental disorders. Both groups of patients were prescribed antipsychotic drugs and trihexyphenidyl on long-term basis. Besides other socioclinical parameters, premorbid personalities, stressful life events and extrapyramidal symptoms including

**Table II: Demographic characteristics of substance misuse cases and clinic sample**

	Substance use disorder (n=93)	Clinic Sample (n=291)	Statistics	P
Mean Age±SD	26.12 ± 6.41	30.46 ± 11.03	t= 4.289	P<0.0001
Sex				
male	88 94.6%	172 59.1%	X <sup>2</sup> =40.66	p<0.0001
female	5 5.4%	119 40.9%		
Education years	8.72 ± 3.65	11.09 ± 5.127	t= 3.393	P<0.001
Marital Status				
married	48 51.6%	174 59.8%	x <sup>2</sup> = 2.0	n.s.
single	39 41.9%	103 35.4%		
divorced& widowed	6 6.5%	14 4.8%		
Employed	57 61.3%	278 95.5%	x <sup>2</sup> = 74.23	P<0.0001
unemployed	36 38.7%	13 4.5%		

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7. psychiatric disorder. *Psychological Medicine*, 24,121-131.
8. Amin, Y. & Hamdi, E. (1995) Gender differences in psychiatric admissions: the influence of culture and social structure. *Arab Journal of Psychiatry*, 6,66-81.
9. Younis, Y.O. & Saad, A.G. (1995) A profile of alcohol and drug misusers in an arab community. *Addiction*,90,1683-1684.
10. American Psychiatric Association (1987) *Diagnostic and Statistical Manual of Mental Disorders*, 3 rd Edition Revised. Washington DC : APA.
11. Edwards, G. (1987) *The Treatment of Drinking Problems*. Second edition. (London, Blackwell Scientific Publications )
12. Bebbington, P. (1993) Transcultural aspects of affective disorders. *International Review of Psychiatry*, 5, 145-156.
13. Leighton, A. H. (1959). Mental illness and acculturation. In GALSTON I, (Ed.) *Medicine and Anthropology* (New York, International Universities Press).

**Table I : Substance misuse consultation rates by nationality in private practice**

	<b>Substance use disorders</b>	<b>Other Psychiatric Disorders</b>	<b>Total</b>
Nationals	75 (18.9%)	322 (81.1%)	397(47.7%)
Other Gulf Arabs	9 (10.8%)	74 (89.2%)	83 (10%)
Expatriates	9 (2.6%)	343 (97.4%)	352 (42.3%)
<b>Total</b>	<b>93 (11.2%)</b>	<b>739 (88.8%)</b>	<b>832 (100%)</b>

$\chi^2 = 50.15, df = 2, P < 0.0001$

Edwards<sup>(10)</sup> " In Africa and Asia rapid changes in the structure of society, and in particular the influences of urbanization, have meant that old social or religious controls over drinking have broken down at exactly the same moment as economic forces have led to... imported liquor being aggressively sold for the first time...Prosperity seems to breed alcoholism as much as poverty". We believe that these statements may be extended to the drug scene in the UAE, and are illustrated by the current report. The tremendous and rapid pace of social change affecting the UAE community particularly in Dubai may have come at a price. In traditional societies the process of change being condensed over a short period of time may be a major source of psychiatric morbidity<sup>(11)</sup>. Concomitant with the social change a variation in the value system, traditional norms of interpersonal interactions may affect the psychological integrity of

individuals. A community unprepared for discrepant social and material development may be more vulnerable to the spread of drug dependence than one in which both aspects occur simultaneously. The concept of Culture Lag<sup>(12)</sup> in which development in one area is not associated with similar development is quite cogent in this respect. It should be noted that the expansion of material wealth and openness to outside influence have not been associated with equivalent standards of education and employment. The process of acculturation that is unavoidably taking place as a result of the expansion of mass media communication and cohabitation with a larger population of expatriates is creating nostalgia and at the same time a sense of social vacuum that may act as a factors that precipitate drug misuse in predisposed persons.

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## References

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1. Department of Planning and Research (1996). The 1996 UAE Population Census Report. Ministry of Planning, United Arab Emirates.
2. Leung, P.K, Kinzie, J.D, Boehnlein, J.K, Shore, J.H. (1993) A prospective study of the natural course of alcoholism in a Native American village. *Journal of Studies on Alcohol*, 54(6) : 733-8
3. Barthwell (1995) Alcoholism in the family: A multicultural exploration. *Recent Developments in Alcoholism*, 12, 387-407.
4. Hamdi, E. (1992) Unpublished Service Report. Department of Health and Medical Services, Dubai (Rashid Hospital).
5. Ghubash, R., Hamdi, E., & Bebbington, P. E. (1992) The Dubai Community psychiatric Survey: Prevalence and sociodemographic correlates. *Social psychiatry and Psychiatric Epidemiology* 27, 53-61.
6. Ghubash, R., Hamdi, E., & Bebbington, P. E. (1994) The Dubai Community Psychiatric Survey: Acculturation and the prevalence of

Concerning the type of drugs misused, heroin dependence is highly represented (46/93; 49.5%). Polydrug abuse was less common (28/93; 30.1%). Most cases with polydrug abuse had heroin on the list of preferred substances of abuse. The combination of heroin, alcohol and cannabis was found in 19 cases. Alcohol related problems were present in 11.8% (11/93). Benzodiazepine dependence was found in 6.5% (6/93). Solvent abuse was the presenting form of abuse for two cases only (2.1%). Cocaine was used by five cases of polydrug abuse. It is not of common use among patients with dependence problems because of its lesser availability in UAE.

## Discussion

There are two published reports<sup>(7,8)</sup> in addition to this study that show a higher rate of alcohol and drug related problems among nationals compared to expatriates in the UAE. Nationals presenting with drug and alcohol related problems comprise a special group: mainly males in the age group 21 to 30 years, with lesser degrees of education, and more unemployment. Heroin and alcohol are highly represented on the list of drugs. This finding may reflect differential utilization of psychiatric service or the impact of unrecognized social adversity. Both possibilities are complex and require further specifically designed studies.

The possibility that expatriates may have the same rate of substance use disorders but elect not to use the psychiatric service is supported by the inherent

insecurity about employment status should such a problem be known to others. This possibility is not supported however by the treatment setting in which this study was conducted; a setting that affords guaranteed confidentiality. The possibility that expatriates may prefer to seek treatment in their home countries during leave periods<sup>(8)</sup> is tempting but not supported by the continuous nature of dependence problems. The economic factor and a social selection factor may seem more pertinent. The majority of expatriates cannot afford the cost of heroin in particular which is estimated to be in the range of 100 pounds for one gram of powder. Medium and high income expatriates are often selected for employment in the midst of a productive career, the majority have stable family backgrounds and would therefore constitute a lower risk group as a whole. Affordability of private treatment is one factor that may explain the higher consultation rate among nationals. However, this may not be the only reason since a large number of private companies provide medical insurance for their employees. Furthermore, the costs of private consultation are well below their averages in western countries. The pursuit of confidentiality is a significant factor but does not explain the difference observed between nationals and expatriates.

A social causation hypothesis is intended by this report to explain the higher representation of nationals with a substance use disorder in private practice. In connection with alcoholism,

## Material and Method

The population of Dubai amounts to 600,000. Psychiatric services consist of three private clinics, one psychiatric unit in a general hospital, and a federal mental hospital. The catchment area extends to the northern Emirates where psychiatric services are not fully represented. Occasionally, cases from neighbouring countries (e.g. Qatar and Kuwait) present for treatment.

All records of cases attending a psychiatric outpatient clinic in Dubai over a period of 2.5 years (July 1991 to January 1993) were screened for the presence of drug and alcohol related problems. The clinic was run by the first author who interviewed and held responsibility for managing all patients. A daily record is maintained for all cases attending the clinic. Case notes include a comprehensive case history and follow-up observations. Diagnoses were made in accordance with DSM-III-R<sup>(9)</sup>.

## Results

Among a total number of 832 consecutive new cases attending the outpatient clinic over two and a half years, the total number of subjects presenting with illicit drug and alcohol related problems was 93 (11.2%). The majority of cases came from the indigenous population (80.6%). Nine cases (9.7%) were expatriates employed in Dubai. Only five females presented with a substance misuse problem over the reported period.

Female cases included three nationals; two with heroin dependence and one with benzodiazepine dependence. The remaining two cases were expatriates one presenting with alcohol dependence and the second with benzodiazepine dependence.

Analysis of nationalities of the whole outpatient population attending the clinic during the same period of time showed that nationals were not a clear-cut majority, 47.7% (397/832). The expatriate population constitutes 42.3% (352/832).

Other gulf citizens reached 10% (83/832) (table I). The differences are highly significant and indicate that a higher proportion of nationals (18.9%) presenting for consultation in private practice suffer from a problem with illicit drugs and alcohol compared to the proportions of the same disorders in the non-national sample (2.6%).

A comparison of demographic characteristics of the substance misuse sample with 300 consecutive new cases attending the clinic for other psychiatric problems is illustrated in table II. Nine cases below the age of 12 presenting for childhood psychiatric problems were excluded from the comparison sample. Cases of substance misuse are predominantly male (94%). They are significantly younger (mean age, 26.1 years) with 80.9% falling in the 21-30 age group. They are less educated (mean number of education years, 8.7), and unemployed (39%) compared to the clinic sample.

## Introduction

The United Arab Emirates (UAE) has witnessed major urban development as a result of the discovery of petrol in the sixties. A huge heterogeneous expansion of the expatriate workforce led to significant demographic changes. At present, the native population constitutes around 20% of a total estimated at 2.6 million inhabitants<sup>(1)</sup>. The indigenous population is exposed to Asian, other Arab and most of all Western cultural values. The social situation is such that the indigenous Bedouin community with its Islamic culture is largely diluted by a foreign majority. This creates an important natural experiment into the effects of social change on psychiatric morbidity. The impact of foreign culture is similar in some respects to the experiences of the indigenous populations of Australia, New Zealand and the United States who experience higher rates of alcohol and substance misuse<sup>(2,3)</sup>.

The problems of alcohol and drug dependence have only recently been reported in the UAE. Hamdi<sup>(4)</sup> reported that alcohol and drug-related psychiatric admissions to Rashid hospital, Dubai, ranged between 20-25% of all psychiatric admissions over a 5 year period. In a community survey of mental disorders in 274 indigenous households in Dubai<sup>(5,6)</sup>, 11% of the sample of 300 women had a problem drinker in the family, and 4% reported substance misuse in one family member. In a prospective survey of psychiatric admissions to Al-Ain Hospital, 14.3%

of the male subjects were alcohol dependent and 5.2% were drug dependent<sup>(7)</sup>. A survey of admission records over 2 years, demonstrated that male nationals had significantly higher rates of drug and alcohol related problems than Asians and other Arab nationalities<sup>(8)</sup>. These studies point in the same direction of clinical experience; namely a higher rate of substance use consultations in the indigenous compared to the expatriate population in the UAE. It is more significant given the fact that the majority of the population at present is expatriate.

The social stigma attached to drug and alcohol dependence in a traditional Islamic culture is considerable. Mandatory police reporting is required in some treatment centers. Prison sentences for illicit substance use and trading have been stiffened lately, so that there may be considerable reluctance to seek treatment in government psychiatric services. In addition, middle and upper class nationals and expatriates may seek private treatment where confidentiality is secured. Therefore, hospital-based studies involving government health services may not reflect a complete picture of substance use disorders in this community.

This study reports the consultation rate for substance use disorders in a non hospital based sample, namely patients seeking private outpatient psychiatric care in Dubai. The study aims at describing the ethnographic differences in consultation rates and attempts to explain them.

## Substance Abuse Consultation Rates: Experience from Private Practice in Dubai Yousreya Amin Emad Hamdi and Rafia Ghubash

معدل الاستشارات بسبب استعمال المخدرات في دبي

يسرية أمين، عماد حمدي، ربيعة غباش

### الملخص

تقوم هذه الدراسة الاستقصائية على عينة متتابعة تتكون من ٨٣٢ مريضاً تردوا للمرة الأولى على عيادة خاصة في دبي. يشكل المواطنون ٢٠٪ من إجمالي السكان، و ٤٧٫٧٪ من المترددين على العيادة، إلا أنهم يمثلون ٨٠٫٦٪ من حالات استعمال المخدرات والكحول. تتميز هذه الحالات مقارنة ببقية مرضى العيادة بأن أغلبها من الذكور البالغين الأصغر سناً، وبأنها أقل حظاً من التعليم وأكثر انقطاعاً عن العمل، تؤكد الدراسة الملاحظات السابقة التي تشير الى نسبة أعلى من استعمال المواد المخدرة في هذا القطاع من المرضى والتي تبين منها أيضاً أن استعمال مشتقات الأفيون أكثر شيوعاً من استعمال الكحول في مرضى العيادة الخارجية، كما تطرح الدراسة احتمال ارتباط هذه النسبة المرتفعة بالضغط الناشئة عن التغيرات الاقتصادية والاجتماعية خلال العقود الثلاثة الأخيرة.

### ABSTRACT

In a polyethnic sample of 832 consecutive new outpatients attending a private psychiatric clinic in Dubai, drug and alcohol related problems were highly represented among nationals. Nationals constitute around 20% of the general population in Dubai and 47.7% of the whole patient population of the clinic but constitute 80.6% of all substance abuse cases. Substance abuse patients were mostly male, younger adults, less educated and more unemployed than other psychiatric outpatients. The study confirms earlier observations indicating higher substance abuse among nationals frequenting psychiatric services. Heroin-related problems are more common than alcohol-related problems in outpatients. A social causation hypothesis based on the stresses resulting from major socioeconomic changes during the latter three decades may explain these findings.



**Table (12)**  
**Voluntary and Involuntary Admissions Versus Occupation and Substance Abused**

	Total (%)	Commerce	Military	Student	Government Employee	Unemployed	Freelance	%	
Voluntary	68	0	5.9	21.6	2.9	41.2	28.4		Volatile substances
Involuntary	32	0	2.1	12.5	6.2	41.7	37.5	6.2	
Voluntary	42.6	0	15	5	15	30	35		Rare drugs
Involuntary	57.4	0	3.7	3.7	18.5	44.5	29.6	1.9	
Voluntary	46.7	0	0	0	57.1	14.3	28.6	0.6	Cannabis
Involuntary	53.3	0	0	0	25	12.5	62.5		

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**Table (11)**  
**Voluntary and Involuntary Admissions Versus Occupation and Substance Abused**

	Total (%)	Commerce	Military	Student	Government Employee	Unemployed	Freelance	%	
Voluntary	49.8	2.5	2.6	2.5	22.9	24.9	44.6	40.6	Alcohol
In-voluntary	50.2	0.4	1.8	1.6	14.8	25.8	55.6		
Voluntary	75.6	1.5	3.6	9.2	34.8	20	30.9	25.5	Heroin
In-voluntary	24.4	4	5.3	9.3	29.4	21.3	30.7		
Voluntary	62.0	1.2	9.1	7.5	17.9	23.4	40.9	16.8	Multiple drugs
In-voluntary	38	3.2	3.2	5.9	16.9	22.1	48.7		
Voluntary	47.8	1	5.2	10.3	21.7	20.6	41.2	8.4	Amphetamine/ barbiturate
In-voluntary	52.2	0	5.7	8.5	13.2	20.7	51.9		

Involuntary Versus Voluntary ..... Drug Abuse

**Table (10)**  
**Voluntary and Involuntary Admissions Versus Material Status and Substance Abused**

	Total (%)	Widowed	Divorced	Married	Single	%	
Voluntary	68	0	0	5.9	94.1	6.2	Volatile substance
Involuntary	32	0	2	4.2	93.8		
Voluntary	42.6	0	0	20	80	1.9	Rare drugs
Involuntary	57.4	0	0	14.8	85.2		
Voluntary	46.7	0	14.3	57.1	28.6	0.6	Cannabis
Involuntary	53.3	0	0	25	75		

**Table (9)**  
**Voluntary and Involuntary Admissions Versus Material Status and Substance Abused**

	Total (%)	Widowed	Divorced	Married	Single	%	
Voluntary	49.8	0.4	4.5	40.5	54.6	40.6	Alcohol
Involuntary	50.2	0.2	7.9	30.2	61.7		
Voluntary	75.6	0.2	0.2	28.6	71	25.5	Heroin
Involuntary	24.4	0	0.7	26	73.3		
Voluntary	62	0	4.4	23.4	72.2	16.8	Multiple drugs
Involuntary	38	0	3.3	30.5	66.2		
Voluntary	47.8	0	5.2	24.7	70.1	8.4	Amphetamine/ barbiturate
Involuntary	52.2	0.9	2.8	29.3	67		

**Table (8)**  
**Voluntary and Involuntary Admissions Versus Educational Level and Substance Abused**

	Total (%)	Post-graduate	Graduate	Vocational	Secondary	Inter-mediate	Elementary	Illiterate	%	
Voluntary	68	0	0	1.4	9.8	32.3	46.1	10.8	6.2	Volatile
In-voluntary	32	0	0	4.2	16.7	33.3	35.4	10.4		
Voluntary	42.6	0	5	0	25	20	40	10	1.9	Rare drugs
In-voluntary	57.4	0	0	3.7	3.7	22.2	51.9	18.5		
Voluntary	46.7	0	0	14.3	42.8	14.3	28.6	0	0.6	Cannabis
In-voluntary	53.3	0	0	12.5	25	12.5	37.5	12.5		

**Table (7)**  
**Voluntary and Involuntary Admissions Versus Educational Level and Substance Abused**

	Total (%)	Post-graduate	Graduate	Vocational	Secondary	Inter-mediate	Elementary	Illiterate	%	
Voluntary	49.8	0	2	3	7.6	21.3	53.4	12.7	40.6	Alcohol
In-voluntary	50.2	0.2	0.6	1.4	6.9	19.1	49.5	22.3		
Voluntary	75.6	0.4	3.2	3.6	21.3	38.1	31	2.4	25.5	Heroin
In-voluntary	24.4	0	6.7	0.7	18.6	48	22.7	3.3		
Voluntary	62	0	2.4	4	14.3	35.7	34.1	9.5	16.8	Multiple drugs
In-voluntary	47.8	0	3.9	3.2	16.9	31.2	31.8	13		
Voluntary	47.8	0	2.1	2.1	13.4	33	36	13.4	8.4	Amphetamine/ barbiturate
In-voluntary	52.2	0	1.9	1.9	17	21.7	35.8	21.7		

Involuntary Versus Voluntary ..... Drug Abuse

**Table (6)**  
**Voluntary and Involuntary Admissions Versus Age and Substance Abused**

	Total (%)	< 20 years	21-40 years	> 40 years	%	
Voluntary	68	55.9	42.2	1.9	6.2	Volatile substance
Involuntary	32	45.8	54.2	0		
Voluntary	42.6	15	80	5	1.9	Rare substance
Involuntary	57.4	11.1	77.8	11.1		
Voluntary	46.7	14.3	71.4	14.3	0.6	Cannabis
Involuntary	53.3	0	87.5	12.5		

**Table (3)**  
**Voluntary and Involuntary Admissions Versus Marital Status**

	<b>Total %</b>	<b>Widowed</b>	<b>Divorced</b>	<b>Married</b>	<b>Single</b>
<b>Voluntary</b>	59.2	0.2	2.8	29.9	67.1
<b>Involuntary</b>	40.8	0.2	0	27.8	67

**Table (4)**  
**Voluntary and Involuntary Admissions Versus Occupation**

	<b>Total (%)</b>	<b>Commerce</b>	<b>Military</b>	<b>Student</b>	<b>Government Employee</b>	<b>Un-employed</b>	<b>Freelance</b>
<b>Voluntary</b>	59.2	1.6	4.7	7.5	24.4	23.9	37.9
<b>Involuntary</b>	1.3	3	4.8	16.9	25.2	48.8	40.8

**Table (5)**  
**Voluntary and Involuntary Admissions Versus Age and Substance Abused**

	<b>Total (%)</b>	<b>≤ 20 years</b>	<b>21 - 40 years</b>	<b>&gt;40 years</b>	<b>%</b>	
<b>Voluntary</b>	49.8	6.3	73.2	20.5	40.6	<b>Alcohol</b>
<b>Involuntary</b>	50.2	2.6	75.7	21.7		
<b>Voluntary</b>	75.6	8	90.5	1.5	25.5	<b>Heroin</b>
<b>Involuntary</b>	50.2	2.6	75.7	21.7		
<b>Voluntary</b>	62	16.7	79.3	4.1	16.8	<b>Multiple drugs</b>
<b>Involuntary</b>	38	7.8	85.7	6.5		
<b>Voluntary</b>	47.8	19.6	77.3	3.1	8.4	<b>Amphetamine/ barbiturate</b>
<b>Involuntary</b>	52.2	6.6	82.1	11.3		



**References**

1. Chodoff P. The case of involuntary hospitalization of the mentally ill. *Am J Psychiatry* 1976; 133:5.
2. Chodoff P. Involuntary hospitalization of the mentally ill as a moral issue. *Am J Psychiatry* 1984; 141:384-389.
3. Fernandez GA, My Gard's. Impact of involuntary outpatient commitment on the revolving door syndrome in North Carolina. *Hosp Community Psychiatry* 1990; 41(9):1001-1004.
4. Chaleby K. A comparative study of alcoholics and drug addicts in an Arabian Gulf country. *Soc Psychiatry* 1986;21:49-51.
5. Mann DW. Inpatient treatment of the mentally ill substance abuser: some medicolegal concerns. *J Subst Abuse Treat* 1989;6(1)19-21.
6. Wettstein RM. Psychiatry and the law. In Tabbott JA, Hales RE, Yudofsky SC (eds) *Textbook of Psychiatry*. American Psychiatric Press Inc, Washington DC, p 1071-1076.
7. Schottenfeld RS. Involuntary treatment of substance abuse disorders-impediments to success. *Psychiatry* 1989;52(2)164-176.
8. Siddell JW, Conway GL. Interactional variables associated with retention and success in residential drug treatment. *Int J Addict* 1988;23(12):1241-1254.
9. McLellan AT, Alterman AI, Metzger DS et al. Similarity of outcome predictors across opiate, cocaine and alcohol treatments. Role of treatment services. *J Consult Clin Psychol* 1994;62(6):1141-1148.
10. Wise TN, Berlin R. Involuntary hospitalization: an issue for the consultation-liaison psychiatrist. *Gen Hosp Psychiatry* 1987;9(1):40-44.

**Table (1)**  
**Voluntary and Involuntary Admissions Versus Age**

	Total (%)	< 20 years	21-40 years	> 40 years
Voluntary	59.2	13.3	78.1	8.6
Involuntary	40.8	7.3	79.1	13.6

**Table (2)**  
**Voluntary and Involuntary Admissions Versus Educational Level**

	Total	Post-graduate	Graduate	Vocational	Secondary	Inter-mediate	Elementary	Illiterate
Voluntary	59.2	0.1	2.4	3.2	14.2	30.8	40.7	8.6
In-voluntary	40.8	0.1	2.1	1.9	11.9	26.4	40.5	17.1

most cases they were used in combination. Patients use the stimulating effect of amphetamines during the day and putting themselves to sleep by barbiturate use at night.

The use of amphetamines and barbiturates was responsible for only 8.4% of the total admissions; 47.8% were voluntary and 52.2% were involuntary. Again, the patients were aged between 20 and 40 years. The low percentage of abusers of these drugs admitted to our hospital reflects its low morbidity, not necessarily the actual use in the community. These drugs are usually available in the community. Patients rarely suffer from severe withdrawal symptoms, they usually present for hospitalization only when barbiturates are not available on the street.

The practice of glue- or gasoline-sniffing accounts for 6.2% of our total admissions, the voluntary patients constituted 68% of these and the involuntary 32%. These substances are usually used by younger people, mostly below the age of 20 years. The tendency for adolescents to abuse volatile substances are well documented in the literature. These are cheap substances, readily available to the population. The demographic description of these

patients in our sample is similar to that described in the literature in general. Most of the patients being young, they are brought by their parents without police involvement and are therefore considered voluntary.

Cannabis abusers represented the lowest percentage of admissions among drug abusers in our population, being 0.6%. This is related to the low toxicity and dependency threshold for these drugs. The higher compulsory rate can be explained by the fact that cannabis abusers are usually arrested for other criminal acts, and when the drug abuse is identified they are involuntary admitted to the hospital. Therefore the high rate of compulsory admission for this substance reflects the antisocial behaviour of this section of the population.

Multiple substance abuse, which according to our definition for this paper is abuse that includes more than one of the substances listed above was present in 16.8% of the total cases admitted; voluntary admissions exceeded the involuntary (62% and 38% respectively). Almost all multiple drug abusers were advanced cases, admitted because of withdrawal symptoms and medical complications requiring hospital treatment.

## Discussion

As previously stated, patients admitted to the Al Amal Hospital fall into two groups: voluntary and involuntary. Fifty nine percent of the patients were voluntary and 40% were involuntary. At first one's impression is that the number of voluntary admission are high for the population. It is thought that voluntary admission retains confidentiality of treatment, while an involuntary admission carries a stigma and loss of privacy that would be very embarrassing to the patient. The number of voluntary patients are also affected by the general public's increased awareness of the hazards of drug abuse through campaigns in the mass media. In the patriarchal culture in Saudi Arabia the influence of the family, especially the senior members, is extremely strong. Patients brought in under pressure by their families are considered voluntary patients, thus creating a bias towards that group. It is difficult to formulate a general statement about drug abuse, since each drug used has a different pattern as related to the type of admission. For example, the highest number of admissions was for alcohol abuse, namely 46.6% of the total cases admitted. Alcohol, although illegal in Saudi Arabia is readily available in many forms. For example in cologne, and it is manufactured locally. Among alcoholics there was an almost equal number of voluntary and involuntary patients. This could be explained by the fact that compulsory treatment is part of the legal system in Saudi Arabia.

Prisoners who are convicted for using alcohol have to undergo special treatment and rehabilitation after their prison sentence. The relatively higher number of alcoholics admitted to this facility could also be explained by the high frequency of medical complications of alcohol abuse, such as delirium tremors which augments hospitalization. It was found that abuse occurs between the ages of 20 to 40 years. Our patients were mostly single, of intermediate education and with no specific occupation.

Heroin addiction is one of the most serious forms of addiction. Involuntary admissions constitute about 25% of the total heroin admissions, which is the lowest seen in our study. Considering the serious consequences of heroin abuse this is an expected finding. Heroin can cause severe withdrawal symptoms that force the patient to voluntarily admit himself to the hospital. The stigma of heroin abuse could motivate patients voluntarily admission rather than lose their confidentiality by means of compulsory treatment. Thus, despite the efforts of the media to increase awareness of the dangers of heroin, it was thought that due to the age group of heroin abusers, who range from 21 to 40 years, may well be due to the exposure of the young Saudi population travelling outside the Kingdom, and using the drug mostly to satisfy youthful curiosity. The higher representation of employed patients among heroin abusers reflects the need for income to support this habit. The abused tablets are usually amphetamines and/or barbiturates, in

Hospital is a new facility specializing in the treatment of male substance abusers. If a patient comes to the hospital for treatment voluntarily he is legally protected from indictment. Frequently patients are admitted upon the order of the police and brought forcibly to the hospital for treatment that usually exceeds a three months duration. These patients are not free to leave the hospital without the concession of their family, police or any other authority.

## Methods

We retrospectively reviewed data on all patients admitted to Al Amal Hospital for the Hegira year 1409 (1989). The actual number of patients admitted is classified confidential information and in this paper variables will be expressed as percentages.

The patient admission status, whether voluntary or involuntary was identified. The type of substance abuse was noted. The demographic data for the two groups (voluntary and involuntary) included age, occupation and marital status. Patients had been abusing the following substances: multiple drugs, cough syrup, diarrhea medications, spasmocibalgin or lomotil and occasionally benzodiazepines. The definition of involuntary admission in this paper is that the patient is admitted by police order, and patients admitted through the pressure of the family are classified as voluntary.

## Results

The patient population in Al Amal Hospital is male; there are other facilities for the treatment of drug-addicted females in Saudi Arabia.

The results of the study are summarized in the tables 1-4. The drug abusers' data is shown with age in table 1, with education in table 2, with social and marital status in table 3 and with occupational status in table 4.

Age distribution of each group is tabulated with abuse of alcohol, heroin, multiple drugs, tablets (amphetamines and barbiturates) in table 5, and with abuse of volatile substances, rare drugs and cannabis in table 6. Tables 7 and 8 demonstrate the educational level of the two groups abusing alcohol, heroin, multiple drugs, tablets, volatile substances, rare drugs and cannabis. Similarly, the marital status is shown in tables 9 and 10 and occupational status in tables 11 and 12. We observe that volatile substance abuse is at maximum level among the unemployed. This could be explained by their young age and their failure at school. On the other hand, cannabis abuse is maximum in government employees in the voluntary group; possible for fear of losing their jobs. This contrasts with the "freelance" occupation, which has the maximum compulsory admission, possibly because they do not care about treating themselves unless they are forced to do so. It should be noted that we did not carry out the formal statistical testing procedure due to the confidential aspect of the study.

least were cannabis addicts. Approximately 60% of the total patients were voluntary admissions.

## Introduction

The concept of involuntary treatment of psychiatric disorders is as old as psychiatry itself. In psychiatric disorders that cloud cognition, impair judgment or modify insight and judgment or administrative proceedings involuntary commitment may be desirable, and this has now become an integral part of the psychiatric service in general hospitals<sup>(10)</sup>. Patients with alcohol and drug abuse disorders account for 40% to 70% of all involuntary referrals to community treatment programmes in the United States and other countries<sup>(7)</sup>. During the past few years several hospitals in the Arabian peninsula have opened inpatient services for the treatment of alcohol and multiple drug addiction. A profile of the type and mode of drug abuse<sup>(4)</sup> and a comparative study of alcohol and multiple drug abusers in Kuwaiti psychiatric hospitals have been published<sup>(6)</sup>. Although involuntary treatment of mental disorders involving the psychotic state is well accepted<sup>(1,2)</sup>, there has been a lot of controversy<sup>(6)</sup> about the usefulness of this kind of treatment for drug abuse patients. These patients are not willing to admit their addiction, therefore, their motivation for treatment is seriously impaired, and consequently the beneficial value of the treatment is greatly diminished. This is a clinical dilemma and not a legal one. Where legal theories of behaviour assume

freedom of action medical theories assume determinism. On one hand it is assumed that the phenomena of addiction defy such distinctions and they cannot reliably be assigned to either medical or legal remedy<sup>(3)</sup>. On the other hand the involuntary treatment of addiction has proved effective in many centres. Feranadez et al<sup>(3)</sup> showed a statistically significant decrease in inpatient stays and outpatient visits to a state hospital during past years, with a reduction in admission rates. Assessment of variables related to success in residential drug treatment units has shown that variance contributed by demographic psychological and inter-actional variables is associated with client rotation. The degree of social support and employment at discharge accounted for 63% of the variance. Factors related to successful treatment included voluntary admissions, family involvement in treatment, degree of social support and employment at discharge<sup>(8)</sup>. In another study however, greater substance use was predicted only by admission of greater severity of abuse and not by the number of services received during treatment<sup>(9)</sup>.

The aim of this paper is to identify the variables and parameters that distinguish voluntary from involuntary inpatients as seen in a drug abuse hospital in Saudi Arabia. Al Amal

## Involuntary versus Voluntary Patients in a Drug Abuse Treatment Centre in Saudi Arabia

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الادخال الطوعي والقسري لمرضى سوء استعمال العقاقير في مركز علاجي

في المملكة العربية السعودية

أحمد جاد، قتيبه جبلي، موسى جمال

### المخلص

تراجع هذه الدراسة كل المرضى الذين أدخلوا الى مستشفى الأمل المخصص لعلاج الإدمان في الرياض، في خلال سنة هجرية كاملة. لقد قسمنا المرضى الى مجموعتين رئيسيتين وهما المجموعة التي دخلت الى المستشفى طوعاً، والمجموعة التي أدخلت قسراً وبأمر من جهاز الشرطة. ولقد عقدت الدراسة مقارنة بين المجموعتين وذلك على عدة أصدعة. فدرست المجموعتين من خلال الفروق الديموغرافية، ومن خلال أنواع المواد المخدرة المستعملة، والحالة الطبية للمرضى، ومن خلال الظروف التي أدت الى دخولهم. لقد استنتج من الدراسة أن نوع المادة المخدرة كانت المحدد الرئيسي لنوع الدخول طوعاً أم قسراً، ومن ثم تلتهما في الاهمية الحالة الطبية واختلافاتها، يأتي بعدها ضغوط العائلة. لقد كان الهيروين المخدر الرئيسي المستعمل من قبل المرضى المتطوعين بينما كان القنب "الحشيش" هو المخدر الرئيسي في الاستعمال من قبل المرضى المجبرين على الدخول، وكانت نسبة المرضى المتطوعين ٦٠٪ من مجموع المرضى.

### ABSTRACT

This study reviews all patients admitted to Al Amal Hospital, Riyadh, for drug abuse during one Hegira year. The patients were divided into two groups: voluntary admissions, and involuntary admissions as committed by the police. The study was made along the demographic lines to identify the differences between the two groups. It was concluded that the main differential factors in the admission being voluntary or involuntary is related to the type of drug used, the circumstances of abuse, the possible medical consequences to the abusers and family pressures. The patients with the highest rate of voluntary admission were heroin addicts, the

## Nocturnal Enuresis

- adolescents. Archives of General Psychiatry, 5, 490-493.
12. Rutter, M., Yule, W. & Graham, P. (1973) Enuresis and behavioural deviance: some epidemiological considerations. In: Kolvin et al (eds.) Bladder Control and Enuresis. Clinics in Developmental Medicine, 48/49, 137-147.
  13. Wille, S. & Anveden, I. (1995) Social and behavioural perspectives in enuretics, former enuretics and non-enuretic controls. Acta paediatrica, 84, 37-40.
  14. Rutter, M., Tizard, J. & Whitmore, K. (eds.) (1970) Education, health and behaviour. London: Longmans.
  15. Elander, J. & Rutter, M. (1996) An update on the status of the Rutter Parents' and Teachers' scales. Child Psychology and Psychiatry Review, 1, 31-35.
  16. Al Kuwaiti, M., Moshaddeque Hossain, M. & Absood, G. (1995) Behaviour disorders in primary school Children in Al Ain, United Arab Emirates. Annals of Tropical Pediatrics, 15, 97-104.
  17. Mattesson, S. (1994) Urinary incontinence and nocturia in healthy school-children. Acta Paediatrica, 83, 950-954.
  18. Fergusson, D. & Horwood, L. (1995) Nocturnal enuresis and behaviour problems in adolescence: a 15 year longitudinal study. Pediatrics, 94, 662-668.

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not unknown in similar cultures where children are part of a migrant expatriate community.

The fact remains; Arab children show higher rates of enuresis and of associated psychopathology. Enuresis in an Arab child is unlikely to be a solitary complaint, and physicians should take note of that.

## Conclusion

Bedwetting is one of the most common problems encountered in pediatric clinics. It has been taken lightly as an indication of a transient and benign developmental

problem. The data we have, challenges this view. Significant psychopathology is likely to be present particularly of the easily missed emotional type. One is more concerned at the stage of clinical consultation with relieving suffering and distress than establishing causal links. The fact that this sample is drawn from the community reinforces the need to seriously consider the possible presence of significant, distressing psychopathology in any child with enuresis. It is highly unlikely that sending the enuretic child home with a star chart, brown pills or a nasal spray is enough.

## References

1. Alon, U. (1995) Nocturnal enuresis. Pediatric Nephrology, 9, 94-103.
2. Warzak, W. (1993) Psychosocial implications on nocturnal enuresis. Clinical Pediatrics, Special issue, July, 38-40.
3. Bakwin, B. (1961) Enuresis in children. Journal of Pediatrics, 58, 806-819.
4. Wille, S. (1994) Primary nocturnal enuresis in children: Background and Treatment. Scandinavian Journal of Urology and Nephrology Supplement, 156, 1 - 48.
5. Shaffer, D., Costello, A., & Hill, J. (1968) Control of enuresis with imipramine. Archives of Diseases in Childhood, 43, 666 - 671.
6. Shaffer, D. Gardner, A. & Hedge, B. (1984) Behaviour and bladder disturbance in enuretics.: the rational classification of a common disorder. Developmental Medicine & Child Neurology, 20, 183- 188.
7. Wille,, S. (1994) Nocturnal enuresis: sleep disturbance and behavioural patterns. Acta Paediatrica, 83, 772-774.
8. Campbell, g. & Young, J. (1966) Enuresis and its relationship with electroencephalographic disturbances. Journal of Urology, 96, 947-949.
9. Essen, J. & Peckham, C. (1976) Nocturnal enuresis in childhood. Developmental Medicine & Child Neurology, 18, 577-589.
10. Shaffer, D. (1985) Enuresis. In: Child & Adolescent Psychiatry: Modern Approaches. In: M. Rutter & L. Hersov (eds.) Blackwell Scientific Publications (Oxford), 465-481.
11. Michaels, J. (1961) Enuresis in murderous aggressive children and



healthy children aged 7 - 15 years, about 8% had nocturnal enuresis. Our study shows a rate of 5.5% for enuresis in the total population of 6-12 year olds, with a rate of 11% for 6-8 year olds, 5.5% for 9-10 year olds, and 4.0% for those aged 11-12 years. Our results show the same trends in the prevalence of enuresis in relation to age, although they show higher rates for some specific age groups. This may well be a function of methodological differences in sampling since the number of younger boys in this study is too small. However, figures for girls are of reasonable consistency. No Arab studies are available for comparison.

With regards to psychopathology, there appears to be, on the face of it, some significant differences from Western studies. A recent study<sup>(13)</sup> found no significant differences in emotional or behavioural measures between enuretics and controls. However, their sample was too small (15 subjects in each group) to make firm generalizations. Rutter et al<sup>(12)</sup> found a firm association between psychopathology and enuresis. They also noted that this association is stronger for girls than for boys and that it did not vary greatly with age. A prospective study<sup>(18)</sup> found that bed-wetting after the age of 10 years is associated with significant increased risks of conduct problems, attention deficit problems and anxiety/withdrawal. The findings of the current study seems to show in that younger enuretic children showed little difference in emotional measures from the controls. Older enuretics certainly did on behavioural measures according to both parents and teachers; and on emotional

measures according to parents only. The fact that teachers failed to detect differences in the emotional disorders profile of enuretics is not unexpected since teachers are known to be less sensitive than parents to detecting emotional symptoms in children<sup>(15)</sup>.

There are a few possible explanations for the findings of this study:

1. There may well be a genetic-cultural factor; namely that of cousin marriages and marriage within the extended family in Arab culture. Practically, this means that there is a much higher genetic loading for enuresis in Arab society with the result that individuals who were enuretic in childhood tend to breed more and more enuretics as adults.
2. It is well known that a strong family history leads to a 'they-will-grow-out-of-it' attitude within the family leading to delays in seeking treatment. It may well be the case that the older enuretics represent children who have a very strong family 'tradition' of being enuretic who would otherwise have been seeking treatment much earlier.
3. It is well known that certain societies have higher rates of enuresis than others<sup>(10)</sup>. The high rates of enuresis among Arab children could simply be part of a general developmental pattern in children in the Arab world.
4. Our data did not differentiate between the two groups of primary and secondary enuretics. We may be dealing with children with a lot of genuine fears and anxieties leading to secondary enuresis. Such factors are

**Table (3)**  
**Prevalence of emotional disturbance among enuretics and controls**

	<b>Emotional (Teachers' report)</b>	<b>Emotional (Parents' report)</b>
Enuretics	07 (14%)	13 (26%)
Non-enuretics	05 (10%)	04 (8%)
	Risk factor 1.4	Risk factor 3.3
	p. value .5	p. value .01*

\* Chi-square, statistically significant

To investigate the possibility that there may be an age factor in accounting for the differences between enuretics and non-enuretics, a further analysis was carried out by dividing the index and the control populations into two groups; 6 - 9 and 10 - 12 years. The mean scores for the two groups of anti-social behaviour and emotional disorder were compared to the corresponding control groups. There are age related differences. For both younger (6-9) and older (10 - 12) groups, there are observable significant differences in relation to anti-social behaviour between the index group and the controls. Younger enuretic children showed no differences from controls in relation to emotional problems, while older enuretics did. Therefore, it looks that the emotional disturbance encountered in the whole group (all ages) is accounted for by emotional disturbance in the older enuretics. As expected, this was better observed by parents than teachers.

## Discussion

A strength of this study lies in that it utilized teachers' reports as well as parents' reports in screening for

psychopathology. The measure of agreement between parents' reports and teachers' reports can be inadequate. However, this largely related to differences in behaviour at home and at school Using both scales is ideal in that teachers' reports and parents' reports complement each other and provide a wider view of any given child's behaviour. This may also partly overcome the disadvantage that we have not used (as would be ideal) a formal structured or semi-structured interview to assess psychopathology. The Rutter scales remain to be of the most valid and reliable instruments in screening for general psychopathology<sup>(15)</sup>. It is acknowledged that using a Western instrument in an Arab culture may not be ideal, but the criticism can be tempered by the fact that the instrument inquires about observable behaviours, rather than internal or external sophisticated concepts that may not be culture free.

The Isle of Wight study, a community study in the UK<sup>(12)</sup> found that around 10% of 5-7 year olds and about 5% of 9 - 10 year olds suffer from night-time enuresis. Recently, Mattesson<sup>(17)</sup> studied the micturition pattern of healthy children using a frequency/volume chart. Of 242

**Table (1)**  
**Prevalence and gender distribution of bed-wetting during the previous year in the community sample (N = 911)**

Age Group	Boys	Girls	All
6-8	0.2 (sample too small)	11.6	11.4
9 - 10	6.5	4.1	5.5
11 - 12	3.7	4.6	4.0

There were 50 children aged 6 - 12 who were reported by their parents to have been bedwetting either occasionally or at least once a week. Eighteen (36%) were boys and 32 (64%) were girls. Exactly half were UAE nationals and the other half were other Arabs. Thirty eight percent were aged 6 - 8 years, 30% were aged 9 - 10 years and 32% were aged 11 - 12 years.

**Associated Psychopathology Behaviour Disorder (Anti-social Behaviour)**

Children who scored 3 or more on the behaviour disorder items according to either teachers' or parents were considered to show behaviour disorder (usually meaning anti-social behaviour). Compared to the control group, enuretics showed significantly higher rates of anti-social behaviour and high risk factors, according to both parent's reports and to teachers' reports, as shown in table 2.

**Table (2)**  
**Prevalence of anti-social behaviour among enuretics and controls**

	Anti-social (Teachers' report)	Anti-social (Parents' report)
Enuretics	13 (26%)	17 (34%)
Non-enuretics	02 (4%)	06 (12%)
	Risk factor 6.5	Risk factor 2.8
	p. value .002*	p. value .009*

\* Chi-square, statistically significant

**Emotional Disorder**

Children who scored 3 or more on the emotional disorder items according to either teachers' or parents were considered to show an emotional disorder.

Compared to the control group, enuretics showed significantly higher rates of emotional disturbance and a high risk factor according to parents' reports but not according to teachers' reports, as shown in table 3.

answer 'does not apply', 'applies somewhat' or 'certainly applies'. Each is assigned a score of 0, 1, 2 respectively. It takes a few minutes to complete. Scoring is done by adding across all of the items to give a total score. Usually, a score of 13 or above indicates psychiatric disturbance. Sub-scores of five items for behaviour disorder and four items for emotional disorder give a broad indication of the type of disorder according to which score is higher. Hyperactivity is scored separately on 3 items. The teachers' scale is shorter with 26 items and a cut-off score of 9 points. It more or less covers the same behaviours as those covered by the parents' questionnaire with some modifications. Similarly, it gives an indication as to the type of disorder according to sub-scores on behavioural and emotional items. and Arabic version of the Teachers' questionnaire was used. It has been used successfully in a similar study<sup>(16)</sup> in Al-Ain. This is the first time an Arabic version of the parents' questionnaire is used. We used the same terminology for the parents' version as that of the teachers'. Only Arabic speaking parents were targeted with the parents' version.

### **Procedure**

The study was carried out in December 1995 (more than 3 months after the start

of school) in order to make sure that teachers' have had a good opportunity to make valid statements on the individual child's observed behaviour. The head teacher of each school took responsibility of informing teachers of their role in carrying out the data collection. Specifically, teachers were told that they should not respond to an item unless they were certain of their response.

Out of the total population, records of those who were reported by their parents to be bedwetting occasionally or at least once a week (enuretics) were identified. A control group of non-enuretics matched for age and gender was then selected from the total population. Comparisons were then made between the two groups in relation to the presence and type of psychopathology.

### **Results**

A total of 911 pairs of responses were obtained. This represents 82% of the total targeted population. Originally, 1100 students were targeted. They did not include, private schools and schools for those with learning difficulty. Table 1 shows the age prevalence and gender distribution of the enuretics in the larger population.

## Introduction

Night-time wetting is one of the commonest conditions encountered by primary health care workers and by pediatricians<sup>(1)</sup>. It is estimated that 5 million children in the United States are affected by enuresis<sup>(2)</sup>. It is considered as a bio-behavioural problem with a strong genetic element. It commonly runs in families with 56-70% of all enuretics have a first degree relative who is or has been suffering from the same condition<sup>(3,4)</sup>; and monozygotic twins show significantly higher concordance rates for enuresis than dizygotic twins<sup>(5)</sup>. It has also been linked to urinary tract infection<sup>(6)</sup>, bladder size or dysfunction<sup>(6)</sup>, sleep pattern<sup>(7)</sup>, EEG abnormalities<sup>(8)</sup>, developmental delay<sup>(9)</sup> and early childhood experiences such as harsh toilet training. However, enuresis can also be considered as a psychiatric or psychosocial disorder<sup>(10)</sup>, from the psychoanalytic perspective<sup>(11)</sup> or from the psychopathological perspective<sup>(12)</sup>. The mechanism for this association seems to be, at least partly, related to self-image. Warzak<sup>(2)</sup> suggests that many enuretics, primary or secondary, are at higher risk for emotional or physical abuse, and may suffer from stress related to fear of detection by peers, with the obvious impact of this on the child's self-esteem and self-perception.

There has been some debate as to whether primary enuresis is less likely than secondary enuresis to be associated by psychopathology. Secondary enuresis has traditionally been viewed to be linked with psychopathology and different forms of stress. Furthermore, support to the notion

that primary enuresis is not a psychological problem is still forthcoming<sup>(13)</sup>. However, this does not preclude the presence of psychopathology, as a consequence, in those with primary enuresis. The purpose of this study is to investigate the co-morbidity of enuresis (primary or secondary) and psychopathology in a community sample, which if confirmed would have significant clinical and management implications.

## Methodology

### Population

The study population comprised a multiple stratification sampling design. Of about 22 public primary schools in Al Ain city, UAE, six were chosen at random. Three classes of each year were then identified. The first ten names on each class list were then identified. Teachers were asked to fill out a questionnaire (see below) about their observations of those ten students. Each student was given a sealed envelope which contained the parent's version of the same questionnaire. All questionnaires were completed and returned within a week.

### Instruments

The Teacher's and the Parent's versions of the Rutter questionnaire were used<sup>(14)</sup>. They detect behavioural disturbances among large groups of children from the general population. This questionnaire is a well established tool which has been widely used world-wide<sup>(15)</sup>. The parent's scale consists of 31 statements about children's behaviour to which respondents

## Nocturnal Enuresis and Psychopathology: Associations in a Community Sample

Harith Swadi

التبول اللاإرادي الليلي والأمراض النفسية: الارتباطات في عينة بيئية

حارث سوادي

### المخلص

أجريت دراسة ميدانية على عينة من طلاب المدارس في مدينة العين وقد شملت الدراسة عينة من الأطفال تتراوح أعمارهم ما بين 6-12 سنة، ولقد استعملت استبانته (روتس) نسخة المدرسين والآباء. لقد بينت الدراسة أن نسبة المصابين بالتبول اللاإرادي الليلي بلغ 5.5% مقارنة مع الأطفال الأسوياء، وأيضاً بينت الدراسة أن المصابين بالتبول اللاإرادي يعانون أكثر من غيرهم من الاضطرابات الوجدانية والسلوكية. ولهذا يرى الباحث أن من المستحسن إجراء استقصاء شامل للاضطرابات النفسية عند هؤلاء الأطفال حيث أن التبول اللاإرادي عادة لا يكون المشكلة الوحيدة لديهم.

### ABSTRACT

A community survey of a stratified sample of 6-12 year old primary school children was carried out in Al Ain city, UAE using the Parents' and Teachers' versions of the Rutter Questionnaire for children's psychological health. The results showed that 5.5% had nocturnal enuresis. Those with enuresis were compared to non-enuretics matched for age and gender. The results showed that enuretics showed higher rates of behavioural and emotional problems according to both teachers' and parents' reports. Older children showed higher rates of emotional problems than younger children. It is concluded that all children with enuresis should be screened for psychological problems as enuresis is unlikely to be a solitary problem.

Sexual Dysfunction

15. Semans JH. Premature ejaculation: A new approach 1956;49:353.
16. Fordney DS. Dysparunia and Vaginismus. Clin. Obstet. Gynecol. 1978;21-205.
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quite effective for the patient and three months after the start of treatment, he was

able to perform well with his wife.

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### References

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1. Masters WH, Johnson VE. Human sexual inadequacy. Little Drown, Boston 1970.
2. Kaplan HI, Sadock BJ. Human sexuality - in synopsis of psychiatry. Williams & Wilkins 1991.
3. Crowe M. The treatment of sexual dysfunction. In family and marital psychotherapy. Skinner SW 1979.
4. Patai R. The realm of sex in the Arab mind. Charles Scribner's Sons. New York 1976.
5. El-Saadawi N. The hidden face of Eve: Women in Arabian World. Zed Press 1980.
6. Chaleby K. Psychological stresses and psychiatric disorders in an outpatient population in Saudi Arabia. Acta Psychiatr Scand 1986;73:147-51.
7. Chaleby K. Traditional Arabian marriages and mental health in a group of outpatient Saudis. Acta Psychiatr Scand 1988;77:139-42
8. Furlow WL. Male sexual dysfunction. Urol Clin North Am 1981;8:0.
9. Al Abdul Jabbar J. Socio-cultural antecedent of psychiatric disorder in Saudi Arabian women. PhD Thesis, University of London 1989.
10. Dawkins S, Taylor R. Non-consummation of marriage. Lancet 1961;2:1029.
11. Marnissi F. Beyond the veil. Male-female dynamics in a modern Moslem society. John Wiley and Sons, New York 1975.
12. Al-Abdul Jabbar J, Chaleby K. Marital therapy with Arab patients 1991 submitted.
13. Lopicolo J, Stock WE. Treatment of sexual dysfunction. J Consult. Clin Psychol. 1986;54:158-67.
14. Arentewicz G, Schmidt G. Therapy setting in the treatment of sexual disorders. 1984;151-4.



psychiatrist for impotence. The husband stated after recovery that he had been married for seven years to his cousin, who is eight years younger, and since the wedding day he had not been able to perform sexually with her because of weak erections, so she had remained a virgin. Both the patient and her husband kept this a secret from everyone, including their families. Yet as the pressure from his family increased, urging him to marry another wife, blaming his wife for not having children, the husband decided to seek medical help.

On interviewing the wife she expressed great fear of sexual intercourse, that it might be painful; suggesting an element of vaginismus. However, because her husband suffered from a sexual dysfunction, impotence, her vaginismus was not that obvious. But she was anxious and depressed, especially with the tremendous criticism from her in-laws.

The first step in her management was to alleviate her depression and anxiety. She was put on amitriptyline 75 mg daily. During the third week of treatment the second step was performed, which included explanations and education about the nature of sexual activity and about the modified Masters and Johnson technique. She and her husband agreed to surgical removal of her hymen, which was performed after a period of relaxation using relaxation techniques. At the same time her husband received treatment for his sexual dysfunction. Both spouses were quite motivated and understanding. She became less anxious and depressed and both partners were able to perform quite

successfully eight months after the start of treatment.

**Case 3:** A 29-year-old recently married Saudi male soldier in the National Guard was seen at the Psychiatric Outpatient Department complaining of loss of erections whenever he wanted to perform sexually with his virgin wife. When he tried to penetrate the erection faded without ejaculation, in spite of a good erection during the foreplay stage. He also had normal spontaneous erections. The patient became anxious after he had tried several times with no success. This had led to a state of total avoidance of any sexual intercourse, and he started excessive masturbation which gave him feelings of guilt. His wife became critical of him and asked for a divorce, which made him more anxious and angry. However, there were no clear depressive symptoms.

The plan of management included in the first stage was a thorough explanation and reassurance about the normal sexual cycle and the psychological changes that take place. The patient did not accept the participation and involvement of his wife, so the modified Masters and Johnson technique was applied. He was instructed to tell his wife about the doctor's instructions to refrain from vaginal penetration. On the second visit, one month after the initial visit, the third step of therapy was started i.e., Phenelzine 10 mg tid, and he was advised to try vaginal penetration. He rejected the idea of letting his wife massage or masturbate him, as well as anything related to a female, superior position. Our therapy was

require discontinuation or dose adjustment.

## The Use of Medication

Because of the limitations described in applying the standard techniques, drugs are often used in more creative ways and not for their exact indication, e.g., the side-effect of MAO inhibitors and fluoxetine may help premature ejaculation, since these drugs have the property of prolonging the ejaculatory phase. Nardil (phenelzine) is effective in social phobia, so it may be useful in relieving performance anxiety in impotence. There have been reports supporting the effectiveness of clomipramine in premature ejaculation<sup>(16)</sup>. As mentioned above, anxiolytic agents are sometimes helpful in Vaginismus and antidepressants in cases of low sexual desire caused by depression.

## Case Vignettes

**Case 1:** An illiterate, 21-year-old Saudi female from a nomadic background was referred from the Infertility Clinic. She had been married for three years (since the age of 18) to her cousin, who was a 36 year-old soldier and father of three children from a previous marriage. The husband refused to participate in treatment. The wife expressed great fear of sexual intercourse. She felt shy and ill-at-ease during the foreplay. She refused to strip in front of her husband and always insisted on turning off the lights. When he tried to penetrate she became extremely fearful and stiff, cried and refused to go

any further. Her behaviour was initially tolerated by her husband, but later on he became angry and suspicious that she might not be a virgin, and so was acting in this way to avoid being discovered. Furthermore, his family were pushing her to seek medical advice about not having children. The patient revealed much anxiety related to penetration of the hymen since she had been told by her friends that it is very painful and causes massive bleeding. That was why she would not let her husband carry on with intercourse.

The first step in treatment was the provision of detailed information about the anatomy of the vagina, the menstrual cycle and the physiological changes of sexuality. After a great deal of persuasion her husband agreed to be interviewed. When the use of vaginal dilators were discussed he refused, but agreed instead to the surgical removal of his wife's hymen. The patient was given Ativan (lorazepam) 0.5mg bid, which reduced her anxiety, and the surgical procedure was carried out. She continued to attend the Psychiatric Clinic for about a month after the procedure, after which she was able to tolerate vaginal intercourse quite successfully. Six months later she became pregnant.

**Case 2:** A 28-year-old Saudi female university graduate teacher, who had been married for almost seven years with no children was seen at the request of her husband, who had been admitted to the Psychiatric Inpatient Unit in a delirious state after taking different kinds of medications given to him by a private

interaction is so stressed that to participate actively is unrealistic in most cases. Alternatively, the "stop-start" technique, described in the literature<sup>(15)</sup> was found to be feasible, and this requires only one partner, namely the man. This can be achieved by replacing the female's manipulation of the partner's penis with active foreplay, but more important are short periods of interrupted intercourse. To interrupt intercourse in the "stop and start" technique might be resisted. However, if the patient is informed that this is the best method for cure he might co-operate.

### **Vaginismus**

Vaginismus is probably one of the most common female sexual disorders seen in clinical practice. It takes the form of local tightness of the vaginal orifice. In our patients it may be accompanied by generalized features, where the body is stiffened and her legs are tightened together with a sensation of paralysis. This problem is usually encountered during the first days of marriage. The classical method of using vaginal dilators or fingers are again not readily acceptable in the culture, although it could be used after long preparation<sup>(15)</sup>. However, this preparation must include individual psychotherapy, relaxation exercises and sex education to reshape the patient's perception of sex. Occasionally, anti-anxiety agents are helpful; however, in our experience these drugs are rarely beneficial unless used in large doses. Many women's fear of intercourse stems from the imagined pain of breaking the

hymen. Surgical removal of the hymen may be necessary in some cases to facilitate treatment. At the university hospital hymenectomy was performed on five out of six cases seen in one year.

### **Low Sexual Desire**

Low sexual desire has its roots in the unconscious inhibition of sexual desires that the patient has carried throughout his/her childhood. This requires intensive individual psychotherapy. Since this problem is mostly encountered in females in our culture then a female therapist is the most suitable, and often the only way a patient can be treated. Masters and Johnson techniques using masturbation and fantasies would be extremely difficult to apply as there are many cultural and religious prohibitions against them. Treatment of depression when it is a factor often requires antidepressant medications.

### **Retarded Ejaculation**

Retarded ejaculation is relatively uncommon in this culture. Using masturbation and fantasy would be resisted so instead we advise that the patient engages in prolonged foreplay, be encouraged to use more elaborate fantasies during this period, and not to begin actual intercourse itself unless he is stimulated to the point of near ejaculation. Many cases of retarded ejaculation are caused by some sort of anxiety that individual psychotherapy and medication may help. In other instances it is due to a side-effect of medication and so will

## **The Sex of the Therapist**

In the classical literature of psychotherapy the sex of the therapist rarely plays a role in the style of treatment, goals or results<sup>(13)</sup>. However, in Arab cultures it would be difficult, if not impossible, to conduct an explicit sexual discussion between a male therapist and a female patient. A female therapist will be able to conduct couple and/or dual therapy when this is indicated. Even in a situation where a male and female therapist co-operates, the mere presence of a male therapist will be inhibitory, embarrassing or confusing to the female patient. Hence, it is preferable that therapy is conducted by a therapist of the same sex as the patient.

## **The Use of Islamic Principles in Therapy**

Since Islam plays a major role in the life-style attitudes and morals of our patients it is necessary to utilize Islamic principles that make sex less threatening. Failing to understand Islamic teaching results in strong inhibition of sexual urges. Educating the patient about the acceptance of sexuality in Islam is of immense value. This is evident in many of the Prophet's sayings and in the Qu'ran.

## **Special Techniques for Specific Disorders**

Certain sexual disorders may require modifications of the classical techniques of Masters and Johnson.

## **Erectile Disorders**

The treatment of impotence in males is usually conducted in individual therapy with a male therapist. Since using the explicit method of "sensate focus" is not feasible and alternative method is used. To avoid embarrassment he tells his wife that on his doctor's orders he should abstain from complete intercourse for a while. In normal circumstances a wife would be surprised and confused if her husband abstained from sex suddenly without any reason, or if he limits it to sexual foreplay without completing the act. However, if he explains that he is following his doctor's orders it is well accepted. The husband is instructed to use "sensate focus" while engaging in foreplay. He can enjoy his wife's body all he wants without completing intercourse. This has a double advantage. Firstly, it relieves the pressure of performance anxiety, and secondly, teaches the patient to use foreplay, which is frequently neglected in the Arab culture, the usual sexual practice within Arab society being devoid of foreplay.

## **Premature Ejaculation**

The classical method of treatment of premature ejaculation, described by Masters and Johnson as the "squeeze technique" requires the cooperation of the two partners. As mentioned above, explicit sexual exercises are not usually accepted in this culture. The woman if required when using the above technique to be an active partner. Unfortunately, her sexual role as the passive one in sexual

adult entertainment and conversation. Very frequently parents engage in match-making with other parents. Expressing their hopes and wishes they sometimes actually plan a marriage between their children. This kind of conversation is made to pass time and express good will; it rarely taken at face value. However it does occur in front of their children, who are thus constantly reminded that some sort of plans for marriage are already being made. Although it is difficult to assess what impact this kind of social practice has on children as they grow up it is not an understatement to see it as a form of subtle seduction.

### **Proposed Culturally-Oriented Techniques for Sexual Therapy**

Correcting the distorted picture of the relationship, developing a new perspective for the couple and learning more effective communication are the main goals of marital therapy. Specific exercises are prescribed for specific problems. The therapist-imposed prohibition on sexual intercourse (until prescribed by him or her) is found to be effective with Arab patients. The main aim of these exercises is towards heightening sexual awareness to touch, sight, sound and smell and making the couple aware of their ability to give and receive bodily pleasure without the pressure of performance<sup>(13)</sup>. Teaching sexual foreplay is an important aspect of learning communication, both non-verbally and verbally to achieve a mutually satisfactory experience. To accommodate this treatment technique to Arab patients certain modification are

necessary. For example, the "sensitive focus" exercises of Masters and Johnson should not be used in the same explicit manner described by the originators of this method of therapy, and the same applies to the use of mutual masturbation. To cover these areas adequately we need to outline certain points.

### **Dual Therapy**

Dual therapy is strongly emphasized in Western literature. We have to understand that the Arab patient finds it difficult and socially embarrassing to have his wife or her husband present to discuss their most private and intimate problems. Very often the husband's pride prevents him from disclosing his weaknesses in front of his wife. Frequently a dysfunctional husband is unwilling for his wife to be interviewed as she has to unveil. Under such circumstances therapist must either refuse any assistance concerning treatment or try to the best of their ability. We choose the later.

### **Sexual Education**

Many erroneous preconceptions about the nature of sex, sexual potency, frequency of intercourse and the physical effects of masturbation need to be formulated on a basis that the patient can understand. For the female it is important to orientate her to accept the idea that sex can also be used for personal pleasure, that her primary function is not always purely one of reproduction, and that it is no reflection on her virtue if she experiences pleasure.

may reach adolescence completely unaware of what is entailed in being married<sup>(9)</sup>. This is a situation that will certainly provoke anxiety, especially in a teenager who is facing an arranged marriage with a poorly matched future husband. A marital relationship where sexual intercourse is expected is a difficult transition. It leads to conflict at the very first attempt at intercourse, making the first experience so unpleasant it paves the way to a long lasting sexual dysfunction. Unconsummated marriages are rarely reported<sup>(10)</sup>; however, they are not uncommon in our practice. A couple have presented in the clinic as cases of infertility after ten years of marriage entirely unaware of the lack of sex as a reason for their infertility.

### **Social Attitudes Towards Sex**

By tradition, sex is an extremely private intimate occurrence between two people. The interpersonal attitudes towards sex is never explicit or explored. Consequently, the message received by a growing girl is that sex is designed for two purposes: (1) reproduction, and (2) the pleasure of the man. Females are commonly confused about whether their sexuality is for reproduction or pleasure. Therefore, unfortunately a sexual experience that is pleasurable for a female is not viewed upon as a virtue<sup>(11)</sup>. This total submission to the man's desire may cause the female who cannot continuously satisfy the male to feel guilt, self-blame and develop an inferior self-esteem. The obligation to reveal little or no sexual desire for herself

often leads to inhibited orgasm and a low sexual desire in females.

### **Communication Disorders Between Marital Partners**

As discussed earlier, married couples may have serious communication problems at all levels<sup>(12)</sup>. However, the sexual relationship further compounds these problems. It should be understood that a married couple usually meet each other for the first time on their wedding night. Socialization between a couple is not a norm; consequently the husband socialized with his male friends and his wife with her own peers, thus reducing contact within the marriage and so promoting communication problems.

### **Subliminal Sexual Stimulation of Children**

It is ironic that in such a highly moral and conservative culture sexual stimulation of children does occur. This takes place in subtle and subliminal ways at times, and on other occasions is explicit but unintentional. When it is explicit but unintentional it stems from the commonly held view that a child of two, three or four years of age is not aware of his surroundings. Many young children experience the primal scene i.e., of their parents having intercourse. Many children sleep in their parent's bedroom until quite mature in age.

The other kind of sexual stimulation is subliminal and subtle. It occurs in the course of a common social practice of

contributor to this kind of disorder is the little or no opportunity for the couple to have had social contact prior to their marriage<sup>(7)</sup>. In our experience treatment of low sexual desire is the most difficult and has the highest failure rate. The prognosis is better when this disorder is secondary to depression, and anti-depressant agents are effective when used along with psychotherapy.

### **Orgasmic Dysfunction**

This type of dysfunction includes premature ejaculation in males as well as anorgasmia, although in males anorgasmia is seen to be rarer than in females. In a culture that emphasized masculinity over femininity the male is more likely to be apprehensive about his performance. This, together with the desire to induce pleasure in the female partner entails prolongation of intercourse. Premature ejaculation is a frequent symptom in male patients with sexual dysfunction, especially in those who have more than one wife and therefore the frequency of intercourse may be too demanding. Anorgasmia in females can be viewed as low sexual desire and is most probably due to the fact that her husband is not taking enough time to please her. The reason being due to her husband having more than one wife may well be one cause.

### **Excitement Phase Disorders**

Impotence, or erectile dysfunction in males and lack of lubrication in females are the main disorders of the excitement

phase. Lubrication disorders in females are not frequently encountered and are believed to be related to cultural issues similar to those discussed under "Low Sexual Desire", with an additional contribution being the man's limited knowledge of foreplay. Erectile dysfunction in males is strongly related to the pressure of performance<sup>(8)</sup>. In past times it was not uncommon for the couple to have to prove that sexual intercourse had been initially successfully achieved by showing relatives waiting outside the bedroom a blood-stained cloth. This ritual put undue pressure on the male for performance.

### **Cultural Aspects of Psychodynamics of Sexual Dysfunction**

It is important to note that the highly moral, conservative attitude towards sexuality that is characteristic of Arab society has been a strong protection against many social maladies. Conservatism in sexual behaviour has always been a strong factor in minimizing the incidence of sexually transmitted diseases and illegitimate births, and thus supported the stability of family life. However, when the religious and cultural values are misinterpreted or not observed accurately the resultant emotional conflicts may be presented in a psychiatric clinic as sexual dysfunction.

### **Faulty Sex Education**

Since sex is a delicate and anxiety-provoking issue, especially between parents and their female children, a girl

was described by Masters and Johnson as the "sensate focus", which is geared towards mutual comfort and sharing without concern about performance or sexual engagement.

The material in this paper is based upon experience at a tertiary care general hospital and a major university medical school in Saudi Arabia. Most of our patients are from middle and upper middle social classes.

Because of the taboo on sexuality in this culture complaints of sexual dysfunction are usually hidden, but may be disclosed fortuitously during marital therapy. Whereas, in Arab cultures marital dysfunction is usually a complaint of the female, sexual dysfunction is more frequently that of the male. This may reflect the man's concerns about his sexuality, and the social inhibition in the woman, who may be less inclined to overcome the taboo. However, more frequently the male presents to the therapist with a sexual dysfunction he feels it would be inappropriate for his wife to know about, or feels more at ease to discuss with a stranger. In which case the treatment should be modified to help the patient achieving the maximum possible satisfaction in his sexual relationship while respecting his desire and the culturally-imposed prohibition on having to bring his wife to the clinic at the same time as he is seeking such assistance.

### **Specific Sexual Dysfunction and the Role of Culture**

The most commonly encountered types of sexual dysfunction in Arab cultures in our

experience are (1) low sexual desire, (2) orgasmic dysfunction and (3) excitement stage disorders. We will discuss each of these and attempt to identify the cultural factors that might modulate their presentation and treatment.

#### **Low Sexual Desire**

Low sexual desire is a frequent presenting symptom in female patients. When a male patient is affected with this kind of disorder it is usually secondary to depression. In females the problem is more difficult to identify. Very frequently no specific cause is identified by the patient. In the Arab world the female is brought up to behave in a socially acceptable manner, which includes a behaviour totally devoid of any kind of sexual connotation. There is segregation of the sex in schools and society<sup>(4)</sup>. Although the message is not always explicit, the little girl growing up will perceive that a good girl should not expect to enjoy sex. This phenomenon is well illustrated by the continued practice in some countries (Egypt, Sudan) of female circumcision<sup>(5)</sup>. Another mechanism that may underlie low sexual desire is an unconscious rejection of the marital partner. Women are usually instructed by their mothers to accept passively their husband's sexual advances; they are not expected to express their own feelings and wishes; sex is accepted as a duty. The alternatives are so limited and her ability to be independent is non-existent. For her to return to her parents' house is not the solution since she might be rejected for having failed in her duty<sup>(6)</sup>. Another



## ABSTRACT

The material in this paper is based on the experience at a tertiary care general hospital and a major university medical school in Saudi Arabia. Most of our patients are from middle and upper middle social classes. Because of the taboo on sexuality in this culture, female complaints of sexual dysfunction are usually hidden but may be disclosed fortuitously during marital therapy. More frequently, the male unilaterally presents with a sexual dysfunction, since he feels it would be inappropriate for his wife to discuss sexual issues with a stranger. The treatment should be modified to help the patient achieve the maximum possible satisfaction in the sexual relationship. While respecting his desire and the culturally-imposed prohibition on having his wife in the office at the same time.

Conservatism in sexual behaviour has always been a strong factor in minimizing the incidence of sexually transmitted diseases and illegitimate births, and has supported the stability of family life. However, when the religious and cultural values are misinterpreted or not observed accurately, the resultant emotional conflict might be presented in the psychiatric clinic as sexual dysfunction.

Commonly encountered types of sexual dysfunction in Arab culture are mainly (1) low sexual desire, (2) orgasmic dysfunction and (3) excitement stage disorders. We will discuss each of these, and attempt to identify the cultural factors that might modulate their presentation and treatment.

## Introduction

The contemporary methodology for the treatment of sexual dysfunction was originated and developed by William Masters and Virginia Johnson in the 1970s<sup>(1)</sup>. The concept of the marital unit or dyad and the approach used represented major advances in the diagnosis and treatment of sexual disorders. When there is sexual distress both partners are involved, and therefore both must participate in the therapy. Disharmony or misunderstanding in the marriage is often reflected in sexual problems. The marital relationship as a whole should be treated with emphasis on the sexual function of

the relationship<sup>(2)</sup>. Both the physiological and psychological aspects of sexual function should be discussed for a harmonious outcome. However, it is not always possible for a therapist to obtain the agreement of both parties to undergo joint discussion for various reasons. Under such circumstances certain adaptations may need to be made.

The modern method of treatment of sexual dysfunction takes a behavioural form. The therapists should interpret the situation as they see it, not the underlying dynamics, although understanding the dynamics of a relationship is often helpful in expanding the views held by each partner. The main form of sexual exercise

## Psychotherapy of Sexual Dysfunction in Arab Patients

Kutaiba Chaleby, Jawahir Al- Abdul Jabbar, Mona Al-Sawaf

### العلاج النفسي للاضطراب الجنسي للمرضى العرب

قتيبة چلبى، جواهر عبد الجبار، منى الصواف

#### المخلص

بنيت المعطيات المدروسة في هذه المقالة من خبرتنا في مجال العلاج النفسي في مستشفى استشاري تخصصي، ومستشفى جامعي في الرياض. وبذلك فهي تشمل مرضى من الطبقة المتوسطة والشرحية العليا من الطبقة المتوسطة الى حد ما. بسبب الحرمة المفروضة على النقاش الجنسي في المجتمع العربي، من النادر أن تظهر شكوى جنسية من أنثى إلا بطريقة غير مقصودة من خلال علاج الاضطرابات الزوجية. أما الرجل فانه يحضر بمفرده عادة ويقاوم أية محاولة لحضور زوجته الجلسات العلاجية. وذلك للحرج الذي يشعرون به من طبيعة شكاوهم، كذلك لعدم تقبل الرجل العربي أن تقابل زوجته الطبيب لنقاش موضوع حساس. من خلال هذه المنطلقات يجب على المعالج أن يجد طرق جديدة ليساعد مريضه نحو التخلص مما يشكو منه، مع الحفاظ على رغباته واحترام تقاليد مجتمعه. لقد كانت التقاليد العربية المحافظة سبباً مهماً لحماية المجتمع العربي من كثير من العلل الاجتماعية والأمراض الجنسية السارية، وبالتالي ثبات واستقرار الأسرة العربية، ولكن المغالاة أو عدم سوء فهم النصوص الدينية في بعض الأحيان قد تسبب نوعاً من الجهل الجنسي وقد تشارك في تشكيل بعض الاضطرابات الجنسية.

إن أكثر أنواع الاضطرابات الجنسية في مجتمعنا تتمحور في اضطرابات الرغبة الجنسية أو انعدامها، أو في اضطرابات الرعشة الجنسية أو في اضطرابات التهيح الجنسي والانتصاب. نناقش في هذه الورقة ما نراه من كيفية الأسلوب الذي ننصح به المعالج النفسي، وكيف عليه أن يكون واعياً لعوامل الثقافة الاجتماعية في بلده، كما عليه أن يحور ما يعرفه من أساليب العلاج الكلاسيكية الغربية لتناسب طبيعة المريض العربي.

# News Letter

## Re: Indexing the Arab Journal of Psychiatry.

The following letter has been received from the Regional Office for the Eastern Mediterranean (WHO).

Dear Dr Takriti,

This is to inform you that issue No. 2, Vol. 5, 1994 of "The Arab Journal of Psychiatry" has been introduced to us by one of our devoted researchers.

As your journal has been reviewed by our staff and was found of great importance, it was decided to include it as a source of input to the Eastern Mediterranean Region Index Medicus (IMEMR).

In view of that, we would like to bring to your knowledge that the WHO Regional Office for the Eastern Mediterranean has been compiling and producing a Regional Index Medicus since 1981. The index is used in two-year cumulation, listing articles that appeared in Health Science Journals published in the Region.

As you will agree, this Index is vital for the attainment of a wider knowledge and accessibility to an important sector in the Region's Health Science Literature. It is also a means of fostering exchange of relevant health and biomedical information among various countries within the Region.

Accordingly, you are requested to supply us with all back issues of the journal up to Volume 1, and put our name on your mailing list for all forthcoming issues, in order to be entered in the sixth cumulation of the Index which is now being prepared.

Any issues sent would be considered as an exchange with a copy of the Regional Index Medicus, and would be sent to you following its publication.

Thank you in advance for your cooperation, and best regards.

Yours sincerely,

Dr M.H. Wahdan  
A/Manager, Health & Biomedical Information

\*\*\*\*\*

## The editor replied :

Dear Dr. Wahdan,

Thank you for your letter dated 31, July, 1996 Ref. (LIB/36(B)/96/429). On behalf of the editorial board of the Arab Journal of Psychiatry, I must extend my appreciation to your decision to include it as a source of input to the Eastern Mediterranean Region index Medicus (IMEMR).

I already mailed the requested back issues of the Journal Vol. 1 through Vol. 7 No. 1.

I look forward to future mutual cooperation.

Sincerely yours,

Adnan Takriti  
Editor

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