Psychosocial Intervention Needs and Quality of Life among Person with Schizophrenia Attending Psychiatric Out-Patient Clinic

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ABSTRACT

Background: Schizophrenia and related disorders are commonly associated with impairment in socio-occupational functions. Various unmet needs are common in persons with schizophrenia. There is a need to address these unmet needs of the patients through a range of psychosocial interventions besides the medicine for better outcomes. **Objective**: To identify the psychosocial intervention needs of individuals with schizophrenia and its correlation with quality of life. **Materials & Method**: This was a cross-sectional study that assessed the unmet needs and quality of life of 26 persons with schizophrenia (F20.0-20.9 as per the ICD-10) coming to Out Patient Department (OPD) of the Department of Psychiatry, Government Medical College & Hospital, Chandigarh consecutively. **Results:** The various areas of highunmet needs identified by patients were - self-care, daytime activities and company of other people followed by information on condition and treatment. There was a significantly lower mean was reported in the environment domain and psychological domain. **Conclusion:** There are various unmet psychosocial intervention needs of persons with schizophrenia attending the psychiatric outpatient clinic were reported which comprehensive psychosocial intervention service.

Keywords: Schizophrenia, quality of life, psychosocial needs

INTRODUCTION

Schizophrenia, in India like the rest parts of the world, is a major mental health problem. The patient can be seen in the acute or chronic phase of the illness, the patient and their caregivers exhibit a complex mixture of clinical and social needs. Biological schizophrenic treatments are becoming more widely used. Patients who respond to antipsychotic drugs suffer also social limitations, a decline in quality of life, behavioural symptoms, residual symptoms, and a loss of work or productivity (Mueser et al., 1991).

The ultimate therapeutic goal in the treatment of schizophrenia, like any other chronic condition, is to allow people with the disorder to live the healthiest and fulfilling lives possible. In addition to targeting the symptoms of schizophrenia, needs to assess and assist with the patient's interpersonal, financial, vocational, and social needs and connect patients with necessary services (Kulhara et al., 2010). Interventions at the social and political levels are largely essential in enhancing overall care quality, as well as opportunities and outcomes for schizophrenia patients. Clinicians who offer care to patients with schizophrenia will help promote improved service provision by lobbying for their patients whenever the opportunity arises (Tandon et al., 2006).

In many underdeveloped countries including India, families have not received the benefits of evidence-based psychosocial intervention, structured family interventions are costly, time-consuming, which makes them unsuitable for countries like India where there is a shortage of qualified staff and mental health facilities. The effect of structured intervention creates a progressive shift and families learn to incorporate the knowledge and skills that they have been taught into their daily handling of the patient (Kulhara et al., 2009).

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The need can be defined as the requirement of the individual patient to enable him to achieve, maintain or restore an acceptable level of social independence or quality of life (Kulhara et al., 2010). Persons with schizophrenia respond well to comprehensive therapy and to the kinds of community-based support provided by institutions to help societies. But these same individuals often need to be persuaded that they have a problem and need to seek help (World Health Organization, 2001). Chronic illnesses such as schizophrenia often affect the lives of patients and their caregivers. Existing research indicates that a positive psychosocial environment has a positive influence on the outcomes of schizophrenia. Family functioning plays a crucial role in the treatment of a person with schizophrenia (Kumar et al., 2020).

The psychosocial interventions can be in any forms groups or individually and these interventions help the mental health providers to prevent relapses and increase treatment adherence in schizophrenia (Adams et al., 2000). Psychosocial interventions may also seek to influence emotional expressions, such as family hostility and criticism in the family, and play an active role in containing and managing symptoms. The relapse rate of patients who are on medications is still 30-50%. To achieve the objective of community rehabilitation it is important to document the coping styles of the schizophrenic patient and their family. Effective rehabilitation would improve the patient and at the same time will deliver a better outcome. Time constraints, as well as a pessimistic outlook of many professionals regarding the treatment of schizophrenia, have made the therapeutic cycle lacking (Lee et al., 1993).

Objective: To identify the psychosocial intervention needs of individuals with schizophrenia and its correlation with question of life.

MATERIALS AND METHOD

Twenty-six persons with schizophrenia (F20.0-20.9) diagnosed as per the ICD-10 (World Health Organization, 1992) were recruited consecutively attending to the Out-Patient Department (OPD) of the Department of Psychiatry, Government Medical College & Hospital, Chandigarh, India with their written informed consent to participate in the study and fulfil inclusion and exclusion criteria. There were thirty patients enrolled in the study however four have not given consent for the study and were excluded from the study. Only clinically stable patients defined as an absence of exacerbation of illness requiring an increase in drug doses by 50 % in the past three months (Lobana et al., 2002) were considered between the age 18 to 55 years and duration of schizophrenia more than 1 year and less than 5 years. Patients with any unstable major medical illness or substance dependence (except nicotine and caffeine) and those who are already receiving the psychosocial intervention were excluded.

Tools used in the study

Socio-demographic and Clinical Data Sheet: It will be a semi-structured proforma included registration number, name, age, sex, educational level, age of onset, duration of illness, duration of treatment, whether ongoing psychosocial treatment, symptoms, sub-type, no. of hospitalization, side effects etc. of the patients with severe mental illness.

Psychosocial Intervention Needs Checklist: This was developed by Singh et.al (2019) based on the World Health Organization's (2001) framework and three research tools The Camberwell Assessment of Need - Research (CAN-R) by (Phelan et al., 1995), Supplementary Assessment of Need Scale (SNAS) by (Neogi et al., 2016), Screening Tool for Assessment of Psychosocial Problems (STAPP) by (Sahu et al., 2019) which assess the areas of psychosocial dysfunctions or problems which requires psychosocial intervention.

Global Assessment of Functioning (GAF): The Global Assessment of Functioning (GAF) is a 100point scale divided into intervals or sections, each with 10 points. The GAF covers the range from positive mental health to severe psychopathology, is a global measure of how a patient is doing and is intended to be a generic rather than diagnosis-specific scoring system. The 10point intervals have anchor points (verbal instructions) describing symptoms and functioning that are relevant for scoring. The scale is provided with examples of what should be scored in each 10-point interval. The present GAF is found as Axis V of the Internationally Accepted Diagnostic and Statistical Manual of Mental Disorders, fourth edition text revision (Endicott et al., 1976; Goldman et al., 1992).

World Health Organization Quality of Life-BREF Hindi Version (WHO-QLO-BREF): It is an abbreviated 26-item version of the WHO-QoL-100 scale and it was developed using data from the field trial. It has been developed cross-culturally and is available in over twenty different languages. This instrument places primary importance on the perception of the individual. It is one of the best-known instruments to measure the generic QoL. It is a self-administered scale that measures the following broad domains: physical health, psychological health, social relationships, and environment. The Hindi version was developed and validated and is widely used in various mental illnesses (World Health Organization, 1998).

Statistical Analysis

The Data was collected and entered in the master chart and later analysed using appropriate statistics with the help of Statistical package social sciences (SPSS 16) was utilised for conducting the analysis. Descriptive statistics – mean and percentage will be used and for the association between variables Pearson coefficient of correlation test will be used and comparative profile

Ethical Considerations

Ethical approval to conduct this study was obtained from the institutional ethics committee. All patients in this study were informed of the nature and purpose of the study and recruited only after their written informed consent to participate in the study, anonymity and confidentiality were strictly mentioned.

RESULTS

Socio-demographic Profile

Table 1 shows the socio-demographic characteristics of a person with schizophrenia (PWS). The mean age of the sample was 28.46 ± 7.81 . The majority of person with schizophrenia were male and single 61.5%, married 38.5%, Hindu 84.6% followed by Sikh and Muslim 7.7%.

Concerning education, the majority were intermediate/ diploma 26.9%%, followed by matric 23.1%, followed by graduate and illiterate 15.4% each, and then followed by primary and middle 7.7%, post-graduation 3.8%.

Concerning occupation Semi-skilled/un-skilled worker 38.5%, unemployed students 34.6%, and housewives 15.4% and followed by Sami professional 11.5%. Considering family income 57.7% living below 10000 and 43.2 between 10001- 20,000. There were 84.4% people living in own home and 15.4% on rented accommodation. All patients were belonging to nuclear family 100%.

The person with schizophrenia was 50% each urban and rural area and mostly belong from Punjab 38.5%, Chandigarh 34.6% and followed by Haryana 26.9%. The majority were speaking Hindi 96.2% and followed by Punjabi 3.8%.

Variable	Variable category	Mean \pm SD/ $f(\%)$		
Age	18-60 Years	28.46±7.81		
Sex	Male	16(61.5)		
	Female	10(38.5)		
Marital status	Single	16(61.5)		
	Married	10(38.5)		
Number of children	One child	2(7.7)		
	Two children	6(23.1)		
Living situation	Own home	22(84.6)		
	Rented accommodation	4(15.4)		
Education	Illiterate	4(15.4)		
	Primary	2(7.7)		
	Middle	2(7.7)		
	Matric	6(23.1)		
	Inter/diploma	7(26.9)		
	Graduate	4(15.4)		
	Postgraduate	1(3.8)		
Occupation	Semi-Professional	3(11.5)		
	Skilled/Semi-skilled/un-skilled worker	10(38.5)		
	Housewife/household	4(15.4)		
	Unemployed/Student	9(34.6)		
Family income	0-10000	15(57.7)		
	10001-20,000	11(42.3)		
Religion:	Hindu	22(84.6)		
	Islam	2(7.7)		
	Sikh	2(7.7)		
Family Type	Nuclear	26(100.0)		
Locality	Urban	13(50.0)		
	Rural	13(50.0)		
Residence	Punjab	10(38.5)		
	Haryana	7(26.9)		
	Chandigarh	9(34.6)		
Languages known	Hindi	25(96.2)		
	Punjabi	1(3.8)		

Table 1: Socio-demographic Profile of Patients with Schizophrenia

Clinical Profile

Table 2 shows clinical details of a person with schizophrenia the mean age of onset was 26.11 ± 7.62 years. The mean duration of illness and duration of treatment was the same 2-5 years 57.7 %, 1-2 years 38.5% and 6-1 month 3.8%. The duration of treatment. Considering the severity of illness 69.2 were having mild symptoms and 30.8 were moderately symptomatic. There were 84.6% had no side effects and 15.4% have side effects of the medicine. The majority of them were having no comorbidity with other illnesses and 3.1% were comorbid. The 26.8% persons had a history of substance and no patient was having a history of family psychiatric illness.

Variable	Variable category	Mean \pm SD / $f(\%)$
Duration of illness	1-2 years	11(42.3)
	2-5 years	15(57.7)
Duration of treatment	6-12 month	1(3.8)
	1-2 years	10(38.5)
	2-5 years	15(57.7)
Severity of illness	Mild	18(69.2)
	Moderate	8(30.8)
Side effects	No	22(84.6)
	Yes	4(15.4)
Comorbidity	No	25(96.2)
	Yes	1(3.8)
History of substance use	No	19(73.1)
	Yes	7(26.9)
Family history of psychiatric illness	No	26(100.0)
Age of onset	26.11 ± 7.62	

 Table 2: Clinical Profile of the Patients with Schizophrenia

Psychosocial Intervention Needs

Table 3: Psychosocial Intervention Needs

Unmet Psychosocial Intervention Needs	f(%)	
Self-care, Daytime activities, Company	26(100.0) each	
Activities of Daily Living	25(96.2)	
Information on Condition & Treatment	24(92.3)	
Psychological distress	23(88.5)	
Treatment compliance, Self-help (SHG, club, society)	22(84.6) each	
Certification	21(80.8)	
Stigma	20(76.9)	
Benefits (social assistance)	16(61.5)	
Employment	10(58.5)	
Vocational training, Reservation in the job, Expressed emotion, Caregivers stress help	8(30.8) each	
Telephone, Free treatment	7(26.9) each	
Psychotic symptoms, Crisis management, Childcare	6(23.1) each	
Travel concession, Transport, Money management, Flexible job timing	5(19.2) each	
Religious/spiritual need, Insurance, Basic education	4(15.4) each	
Conflicts (includes property & family), Medical reimbursement, Looking after the home, Availability of finical recourses	3(11.5) each	
Tax benefits, Safety to self, Nominated representative, Legal aid, Intimate relationships, Drugs, Alcohol, Advanced directives	2(7.7) each	
Social support, Safety to others, Food	1(3.8) each	
Sexual expression, Physical health, More time from clinicians, Home visit, Accommodation, Abuse emotional/physical/sexual)	00	

Table 3 shows there were certain areas of need - are self-care, daytime activities and the company of other people which was reported unmet by all participants. The other areas of unmet needs were activities of daily living (96.2%), information on condition and treatment (92.3%), psychological distress (88.5%), treatment compliance, self-help group, club, society (84.6%), disability certification, stigma (around 80%), benefits of different social assistance schemes e.g. disability pension, travel concessions etc. (61.5%), vocational training, reservation in the job, expressed emotion, help to reduce caregivers stress (30.8%), access telephone, free treatment (26.9%) and psychotic symptoms, crisis management, childcare (23.1%). There are other areas which in unmet for less than 20% of the patients. The study has also identified areas where no unmet were reported those were sexual expression, physical health, more time from a clinician, home visit, accommodation, and abuse of emotional/physical/sexual.

Quality of Life

Domains	Mean ± SD		
Physical health	37.38±8.34		
Psychological	36.80±9.70		
Social relationships	46.92 ± 10.93		
Environment	41.07 ± 5.44		
Total	162.53 ± 24.84		

Table 4: Summary of the WHOQOL-BREF domains

Table 4 indicates that the quality of life in four domains that were physical health, psychological functioning, social relationships and environment of the patient. All the domains show low scores as indicated in the table, however, the environment shows the lowest mean score.

Global Assessment Functioning

The GAF scale evaluates both symptom severity and functioning (GAF-F), ranking a patient from 1 (lowest score) to 100 (highest score). The mean score obtained by the patients were 55.84 ± 10.50 .

Association of Psychosocial Needs with Quality of Life

In table 5 association between various psychosocial needs are with the quality of life was depicted. Overall unmet psychosocial needs are negatively correlated (r = -.599) with the overall quality of life. It shows that those patients who had higher unmet psychosocial needs have and lower quality of life. Certain psychosocial needs like psychological distress, safety to others and services like free treatment and certification have a significant correlation with the domains of quality of life. Factors such as stigma related to schizophrenia and mental illnesses, the influence of symptoms and symptom control, drugs and their adverse effects, financial and economic status, social relationships and family have been associated with QOL in schizophrenia.

Areas of Needs	Physical	Psychological	Social	Environment	Total
Psychotic symptoms	158	.193	.133	.047	260
Treatment compliance	.123	.175	.311	186	029
Crisis management	158	097	.018	.166	.053
Psychological distress	.104	.292	.437*	.171	.014
Safety to others	.693**	.156	.248	.297	.111
Safety to self	083	.102	.070	083	121
Alcohol	083	.102	218	002	.020
Intimate relationships	083	233	.267	.092	.184
Self-help (SHG, club, society)	.123	.097	.020	305	029
Religious/spiritual need	123	.072	.036	.186	.272
Caregivers stress help	.120	223	381	339	361
Expressed emotion	192	081	.004	285	.073
Stigma	184	.075	.155	.106	142
Conflicts	.348	.179	.208	.110	.221
(includes property & family)					
Looking after the home	104	012	.132	036	034
Childcare	.184	.193	.325	.107	051
Basic education	123	097	.036	122	179
Money management	141	096	.093	085	109
Availability of finical	104	.076	.220	036	.221
recourses					
Flexible job timing	.080	.165	208	.182	.102
Vocational training	.120	020	215	.003	198
Employment	.068	156	224	.186	087
Information on Condition &	.058	156	.151	055	.084
Treatment					
Telephone	.150	.187	.188	.174	085
Transport	.225	168	.288	.151	.097
Insurance	123	.228	031	003	075
Benefits (social assistance)	068	.079	.215	.043	.087
Certification	225	.072	.225	.031	399*
Reservation in job	192	.235	101	.244	.155
Travel concession	141	.130	.031	085	014
Free treatment	.150	.187	.234	.279	.465*
Medical reimbursement	104	012	.132	036	034
Nominated representative	104	.370	184	.098	152
Advanced directives	104	004	021	083	.020
Total unmet needs	227	012	225	.031	599*

 Table 5: Correlation of Psychosocial Needs with Quality of Life

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed)

DISCUSSION

In the present study areas of higher unmet needs identified were self-care, daytime activities and company, activities of daily living, information on condition and treatment, psychological distress, treatment compliance and self-help group, club, society. Less than one-third of patients report unmet needs in need of certification, stigma, and benefits, the need for employment and vocational training, reservation expressed emotions. These findings are similar to the previous study (Kulhara et al., 2010). Another study revealed higher unmet needs in areas of psychotic symptoms, daytime activity, company, physical health and information about their condition or treatment (Bengtsson et al., 1999)

A moderate number of patients report there are unmet needs for free treatment and not able to use telephone, patients with need in the management of psychotic symptoms, crisis and child care. The patients felt unmet needs in areas of availing travel concession, use of transport money management and flexibility in job timings.

Less number of patients felt unmet needs in religious-spiritual, basic education, insurance and conflict (includes property and family), medical reimbursement, looking after the home, availability of financial recourses each). The very less unmet needs found in tax benefits, safety to self, nominated representative, legal aid, intimate relationships, drugs, alcohol, advanced directives and unmet need in social support, safety to others, food each. There was no unmet need in the area of sexual expression, physical health, and more time from a clinician, home visit, accommodation, and abuse of emotional, physical, and sexual. A similar study (Buckley et al., 1990) argued to meet the needs of patients; one has to consider both the effectiveness of the program and its acceptability to patients.

All four domains e.g. physical, psychological social and environmental shown a low mean score on WHOQOL-BREF in patients with schizophrenia but a significantly lower mean was reported in the environment domain and psychological domain. A similar study (Lin et al., 2010) shows that patients with psychological problems have poor QOL for multiple health problems, both in physical and mental health. Based on the global assessment functioning the patients report an average level of the mean score. These psychosocial needs have been correlated with the quality of life of the patients, which shows that those patients who report high scores in unmet psychosocial needs or have many psychosocial needs have a low quality of life. According to a study, (Wolf et al., 1997) QOL was favourably connected with social support, patients' educational level, income level, and employment among PWS.

Limitations: Small sample size, purposive sampling, no comparison with any other group of mental illness or controlled group and symptoms were not considered for correlation with disability and rehabilitation needs were some limitations of the study.

CONCLUSION

This study demonstrates that various psychosocial needs were unmet in patients' with schizophrenia, which can be addressed with a compressive psychosocial intervention. Research in the field of schizophrenia should try to move beyond the mere control of psychotic symptoms rather must include social functional recovery. Achieving sustained symptom remission and compliance is an important step towards this goal of treatment. To improve our understanding and management of schizophrenia, it is critically important to address the complexity of needs among patients with schizophrenia.

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Ethical Clearance: Taken

REFERENCES

Adams, C., Wilson, P., & Bagnall, A. M. (2000). Psychosocial interventions for schizophrenia. *BMJ Quality & Safety*, 9(4), 251-256. http://dx.doi.org/10.1136/qhc.9.4.251

- Bengtsson-Tops, A., & Hansson, L. (1999). Clinical and social needs of schizophrenic outpatients living in the community: the relationship between needs and subjective quality of life. *Social psychiatry and psychiatric epidemiology*, 34(10), 513-518. https://doi.org/10.1007/s001270050169
- Buckley, L. M., Vacek, P., & Cooper, S. M. (1990). Educational and psychosocial needs of patients with chronic disease: a survey of preferences of patients with rheumatoid arthritis. Arthritis & Rheumatism: Official Journal of the American College of Rheumatology, 3(1), 5-10. https://doi.org/10.1002/art.1790030103
- WHOQOL Group. (1998). Development of the World Health Organization WHOQOL-BREF quality of life assessment. *Psychological Medicine*, 28(3), 551-558. https://doi.org/10.1017/S0033291798006667
- Endicott, J., Spitzer, R. L., Fleiss, J. L., & Cohen, J. (1976). The Global Assessment Scale: A procedure for measuring overall severity of psychiatric disturbance. *Archives of General Psychiatry*, *33*(6), 766-771. https://doi.org/10.1001/archpsyc.1976.01770060086012
- Goldman, H. H., Skodol, A. E., & Lave, T. R. (1992). Revising axis V for DSM-IV: a review of measures of social functioning. *The American Journal of Psychiatry*, 149(9), 1148–1156. https://doi.org/10.1176/ajp.149.9.1148
- Singh, J., Sahu, K.K., Arun, P. (2019). Psychosocial intervention needs of persons with severe mental illness attending the psychiatric outpatient clinic. [Unpublished dissertation]. Punjab University.
- Kulhara, P., Avasthi, A., Grover, S., Sharan, P., Sharma, P., Malhotra, S., & Gill, S. (2010).
 Needs of Indian schizophrenia patients: an exploratory study from India. Social Psychiatry and Psychiatric Epidemiology, 45(8), 809-818.
 https://doi.org/10.1007/s00127-009-0126-1
- Kulhara, P., Chakrabarti, S., Avasthi, A., Sharma, A., & Sharma, S. (2009). Psychoeducational intervention for caregivers of Indian patients with schizophrenia: a randomised-controlled trial. *Acta Psychiatrica Scandinavica*, *119*(6), 472-483. https://doi.org/10.1111/j.1600-0447.2008.01304.x
- Kumar, R., Nischal, A., Dalal, P. K., Varma, S., Agarwal, M., Tripathi, A., Kar, S. K., & Gupta, B. (2020). Impact of brief psychosocial intervention on key relatives of patients with schizophrenia: A randomized controlled trial. *Indian Journal of Psychiatry*, 62(2), 137–144. https://doi.org/10.4103/psychiatry.indianjpsychiatry_138_19
- Lee, P. W., Lieh-Mak, F., Yu, K. K., & Spinks, J. A. (1993). Coping strategies of schizophrenic patients and their relationship to outcome. *The British Journal of Psychiatry*, 163(2), 177-182. https://doi.org/10.1192/bjp.163.2.177
- Lin, R. F., Chang, J. J., Lu, Y. M., Huang, M. H., & Lue, Y. J. (2010). Correlations between quality of life and psychological factors in patients with chronic neck pain. *The Kaohsiung Journal of Medical Sciences*, 26(1), 13-20. https://doi.org/10.1016/s1607-551x(10)70003-6
- Lobana, A., Mattoo, S. K., Basu, D., & Gupta, N. (2002). Convergent validity of quality of life interview (QOLI) in an Indian setting: preliminary findings. *Indian Journal of Psychiatry*, 44(2), 118-124. https://www.ncbi.nlm.nih.gov/pubmed/21206556
- Mueser, K. T., Bellack, A. S., Douglas, M. S., & Morrison, R. L. (1991). Prevalence and stability of social skill deficits in schizophrenia. *Schizophrenia Research*, 5(2), 167-176. https://doi.org/10.1016/0920-9964(91)90044-r
- Neogi, R., Chakrabarti, S., & Grover, S. (2016). Health-care needs of remitted patients with bipolar disorder: A comparison with schizophrenia. *World Journal of Psychiatry*, 6(4), 431-341. https://doi.org/10.5498/wjp.v6.i4.431

- Phelan, M., Slade, M., Thornicroft, G., Dunn, G., Holloway, F., Wykes, T., ... & Hayward, P. (1995). The Camberwell Assessment of Need: the validity and reliability of an instrument to assess the needs of people with severe mental illness. *The British Journal of Psychiatry*, 167(5), 589-595. https://doi.org/10.1192/bjp.167.5.589
- Sahu, K. K., Chavan, B. S., Bala, C., & Tyagi, S. (2019). Reliability and validity of the Screening Tool for Assessment of Psychosocial Problems. *Open Journal of Psychiatry and Allied Science*, 10(2), 163-168. http://dx.doi.org/10.5958/2394-2061.2019.00039.9
- Tandon, R., Targum, S. D., Nasrallah, H. A., Ross, R., & Treatment Effectiveness in Schizophrenia Consortium. (2006). Strategies for maximizing clinical effectiveness in the treatment of schizophrenia. *Journal of Psychiatric Practice*, 12(6), 348-363. https://doi.org/10.1097/00131746-200611000-00003
- Wolf, J. R. (1997). Client needs and quality of life. *Psychiatric Rehabilitation Journal*, 20(4), 16–24.
- World Health Organization. (1992). *The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines*. World Health Organization. https://apps.who.int/iris/handle/10665/37958
- World Health Organization. (2001). *Brief intervention for hazardous and harmful drinking: a manual for use in primary care* (No. WHO/MSD/MSB/01.6 b). World Health Organization.
- World Health Organization. (2001). The World Health Report 2001: Mental health: new understanding, new hope.

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