A new approach for psychological consultation: the psychologist at the chemist's

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Abstract

Background: The prevalence of mental illness and psychological suffering is greater than the availability of primary care services in Europe and, in particular, in Italy. The main barriers that hinder the access to these services are economic, the lack of proximity of services and some prejudices that may promote stigma and shame. A new mental health service, named "Psychologist in the Neighbourhood" was created to intercept unexpressed needs for psychological assistance. The service allows everyone to ask for free psychological consultation, consisting of no more than four meetings with a psychologist, in certain chemists' shops around the city of Milan. This article aims to present the service specific features of this initiative and the results of a pilot study.

Methods: Information gathered on all users included socio-demographic data, the reasons why they approached this specific service, how they learnt about it, the main presented problem and, for a random sub-group, the level of psychological well-being (as measured by the PGWBI). Socio-demographic data were compared with previously collected information about general users of psychological services. The outcome of the intervention was assessed by the clinicians.

Results: During the two-year project a total of 1,775 people accessed the service. Compared to traditional users of psychological services, the participants in this service were characterized by a higher presence of females, unemployed and retired people. The main factors encouraging access were proximity and the fact that the service was free of charge. Many of the users were redirected to more specific services, while for about a third of the sample the consultation cycle was sufficient to resolve the presented problem.

Conclusions: The interest and participation of the population was high and this initiative intercepted an unexpressed requirement for psychological support. Free access and home proximity, were the main reasons for accessing this specific service. Subjects were mostly re-directed to appropriate services, while about a third of the sample addressed and resolved their problem with the psychologist in the chemist’s shop. These encouraging results suggest the benefits of bringing psychological consultations closer to citizens, particularly to those who cannot afford it, reducing socio-economic inequalities.

Background

In the general population the need for access to psychological services is greater than the actual requests for psychological consultations [1]. The estimated lifetime prevalence of mental disorders in Europe is 25%, with a 12-month prevalence of 9.6% [2]. In Europe, only 25.7% of subjects with a mental disorder have consulted a formal health [3] service within the last year. Moreover, in Italy, no more than 5.5% of the general population has requested the assistance of a psychologist at any point throughout their entire lifetime [4]. It therefore follows that a substantial percentage of the population may benefit from a psychological consultation.

Mental illness and psychological diseases can be very expensive for the community. In fact, among the major medical conditions, psychological and psychiatric disorders contribute to the highest amount of life lost (in years), due to premature mortality and disability [5]. Furthermore, nearly three-quarters of individuals with disabilities related to mental illness are unemployed, and 15% of people with severe mental illness are homeless [6,7].
There are many different barriers that hinder the access to mental health services, and even prevent the reporting of the need for access to services [8]. For example, cultural prejudices may promote stigma and shame [9,10]. Together with cultural reasons, other important barriers are economic reasons [11,12] and the lack of proximity of services [13].

In Italy, psychological services are reimbursed by the National Health System only in the case of psychiatric disorders or in some cases of co-morbidity with a severe physical disease. The general population has the chance to access low-cost psychotherapy from public institutions, but there is often a long waiting list. Therefore, economic barriers may be relevant for some people who are in need of psychological assistance without a lengthy wait, and who do not present a psychiatric pathology or co-morbidity.

The proximity to care is another relevant factor that may impact upon whether or not care is received [14]. In the primary care field, individuals who need to travel more than thirty minutes or do not have access to public or private transportation may be less likely to receive health care [15]. This could be particularly true for mental health field, already hindered by cultural barriers.

In order to provide a primary health care service in the field of mental health, the “Psychologist in the Neighbourhood” project was created. This involves the provision of a service that allows everyone to ask for a free psychological consultation, inside some chemists’ shops around the city of Milan. This peculiar choice was supported by the consideration that chemists’ shops provide a widespread coverage around the city, are easily accessible, and are deputed to provide general health care.

The main purpose of this paper is to present the “Psychologist in the Neighbourhood” project and to provide information about the preliminary results obtained. There are three questions that this pioneering study aims to address: Is this project valuable for the general population and how many people will be interested in taking up this service? What kind of users will ask for this service and will they present some differences to patients being treated by other psychological services? What are the preliminary indications about the obtained effects?

**Methods**

**Description of the project**

The “Psychologist in the Neighbourhood” project was jointly developed by the Catholic University of the Sacred Heart of Milan, the Health Department of Milan Municipality, and the two main Chemists’ Associations: FederFarma and ADMENTA. The project allowed anyone to book a free psychological consultation at one of the 28 chemists’ shops in the city of Milan. Pharmacies are places dedicated to self-care which have a capillary diffusion through the territory and there is regular everyday access for most of the Italian population. The study was approved by the ethics commission of the Catholic University of Milan.

After an initial evaluation interview, participants received the opportunity to benefit from a limited cycle of free psychological consultations, consisting of no more than four meetings with the psychologist. This service was available half-a-day per week at each chemist’s shop, with 45 minutes for each interview. Potential users were able to ask the chemist for the first appointment with the psychologist, but subsequent appointments could be scheduled directly with the clinician. Interviews were conducted in a dedicated location inside the pharmacy, respecting the patients’ need for privacy and intimacy. If necessary, the clinician was able to decide to meet couples or families.

The main purpose of the project was to intercept unexpressed psychological needs, removing economic and proximity barriers to accessing psychological support. The project had the purpose of enhancing the well-being of patients, and improving the understanding and prevention of psychological diseases. Depending on the nature of each person’s needs, these meetings could be sufficient to resolve problems, or they could be used to redirect the need to the most appropriate location (i.e. local services such as hospitals or centres for the treatment of addictions).

The psychologists’ work was directly financed by the chemist who hosted the clinicians. The local media were contacted to increase the service visibility throughout the city. Every pharmacy involved in the study made available a leaflet that informed people about the service availability.

There were 15 clinical psychologists involved in these services. Most of them (N = 8) were also psychotherapists, while the others were PsyD or PhD students. The group represented different psychotherapeutic approaches, with professionals with systemic, psychoanalytic, cognitive-behavioural, humanistic, strategic and integrated approaches. There was constant supervision of all involved psychologists (by EM, GC and EL) and there were group discussions on clinical cases or on any challenges related to this peculiar setting every one or two months.

**Gathered data**

All users were assessed by the clinicians who gathered socio-demographic data such as age, sex, educational level, work activities, the reasons why they had requested this specific service, how they learnt about it (leaflet, word-of-mouth, suggestion by the physician etc.), and the main presented problem. The socio-demographic
data thus obtained were compared with information about Italian general users of psychological services (GUPS), which had been previously collected by another study [16].

The intervention outcome was reported by the psychologist at the end of all the sessions. We identified three kinds of outcome: problem solved (there was no more need of psychological support), problem redirected to territorial services (the user was redirected to the most appropriate location, including further psychological consultations with other services), and drop-out (unilateral client termination of the intervention before the problem was resolved or redirected).

A random sample of users (about 25% of the sample) was assessed before the consultation by means of a psychometric questionnaire, the Psychological General Well-Being Index (PGWBI) [17]. The same psychologists administered the questionnaire to subjects, following a randomized scheme created with a perfect randomization (provided by the website www.random.org). The PGWBI is a brief self-administered questionnaire which contains 20 items rated on a six-point Likert scale, where a higher score indicates a better quality of life. The questionnaire measures six mood states: anxiety, depressed mood, positive well-being, self-control, general health, and vitality. The PGWBI was completed by the users themselves. The PGWBI has been chosen for its demonstrated validity and it has been validated for the Italian population, with normative and comparative values [18]. The purpose of PGWBI assessment was to compare the service users with the normative values.

After a signature of informed consent, all users’ data were recorded, anonymously, and merged in an Excel database by the service psychologists. Data were analysed with Excel and SPSS software by FP and EL.

Results
The “Psychologist in the Neighbourhood” project had a duration of two years and two months and took place between February 2009 and May 2011.

During this period a total of 1,775 people accessed the service, with a total of 6,371 clinical interviews. The average number of visits per person was 3.59 (SD = 2.04), with a mode of four visits. The attendance of interviews was 85% of potential users, considering that the number of chemists had changed over time. Overall, 28 pharmacies and 18 psychologists were involved in the project.

The majority of users were females (76.3%) and the average age was 52. The presence of females (GUPS = 67%) and their mean age (GUPS = 44 years) was therefore higher than for general users of psychological services.

The educational level of users and the GUPS, as well as their work activities, are reported in Table 1. There were significant differences between users of the “Psychologist in the Neighbourhood” service and GUPS for both educational level (Pearson’s chi-squared = 20.82, df = 3, p < .001) and work activities (Pearson’s chi-squared = 46.15, df = 4, p < .001).

The majority of users had heard about the initiative directly at the chemists’ shops, from leaflets (32%) or from the pharmacist (33.5%). Around a quarter of the sample were informed through the media such as newspapers and broadcasts on television (24.5%). Some users (5.5%) accessed the service through word-of-mouth and the remainder through suggestions from their physician (4.5%) (see Figure 1).

The main reasons for requesting the service were “free access” (32.5%) and “home proximity” (31.5%), which supports the evidence presented in the Background section about economic reasons and proximity being the main barriers to accessing mental health services. However, a substantial proportion of users (17%) who entered the service did so because they did not know the appropriate location to answer their needs. Further reasons given for requesting the service were the local health authority’s waiting time (7%) and curiosity (5%), and other reasons were given by 7% (see Figure 2).

Prior to the first interview, 416 random users (83.2% of the 500 contacted subjects) completed the PGWBI. The average total score was 54.6 (SD = 15.02), while the average score in the Italian population is 78.0 (SD = 17.89). In comparison with normative values [18], all the assessed factors at the baseline were significantly

| Table 1 Demographical characteristics of project participants |
|-------------------------------------------------------------|
|                     | Psychologist in the chemistry users | GUPS | Significant Differences (*) |
|---------------------|------------------------------------|------|--------------------------|
| Age (mean)          | 52 years                           | 44 years | p < .001                 |
| Female prevalence (%)| 76.3%                             | 67%  | p < .001                 |
| Education Level (%) |                                    |      |                          |
| Primary school      | 11.6%                              | 10%  | n.s.                     |
| Secondary School    | 26.4%                              | 48%  | p < .001                 |
| High school         | 48.6%                              | 32%  | p < .001                 |
| Graduated (or equivalent) | 14%                              | 10%  | n.s.                     |
| Work activity (%)   |                                    |      |                          |
| Workers             | 42%                                | 54%  | p < .001                 |
| Homemaker           | 3%                                 | 14%  | p < .001                 |
| Students            | 6%                                 | 10%  | p < .05                  |
| Retired             | 36.3%                              | 16%  | p < .001                 |
| Unemployed          | 12.7%                              | 6%   | p < .001                 |

(*) Student’s T-test; n.s. = not significant.
lower than the average for the Italian population (with t-test for independent samples, p from < .001 to < .01; see Figure 3).

The problems presented and identified were multi-faceted. We identified eleven clusters: family and couple troubles (32.1%), anxiety (18.4%), depressive symptoms (17.2%), difficulty managing life situations (8.1%), relational and social issues (4.6%), psychiatric problems (3.5%), emotional management (2.1%), panic (1.9%), eating disorders (1.7%), alcohol abuse and drug addictions (1.7%), and others (8.7%) (see Figure 4).

The treatment outcomes were as follows: 41.2% were redirected to territorial services, 36.8% were resolved, and 22.1% dropped out (see Figure 5). Cases were more likely to be resolved when the expressed request concerned family or social problems and when the subject was experiencing difficulty in managing a particular life situation. Redirection to territorial services was the main outcome for those suffering from eating disorders, drug or alcohol addiction and low self-esteem. Couple problems, and anxious or depressive features presented the highest drop-out rates. Considering the three outcomes as the independent variable and the pre-treatment PGWBI values as the dependent variables, the independent sample t-test indicates no significant differences amongst groups.

**Discussion**

The “Psychology in the Neighbourhood” project allowed everyone to ask for a free course of psychological consultation at some chemists’ shop in Milan. The main purpose of the project was to intercept an unexpressed need for psychological consultation, which may be hindered for economic or proximity reasons. The service was provided free of charge, in geographically widespread locations which people are used to going to for health-related issues.

During the two-year project, the attendance was 85% of the maximum potential users. In our opinion, even if there are no comparable data, the results indicate that
the interest in the project from the general population was quite high.

Users were mainly females, with a significant presence of older people. Many users were retired and unemployed. In comparison with the general population (GUPS), there was a higher female prevalence, and an older average age. The presence of employed people was lower than GUPS, with higher percentages of retired and unemployed people.

It seems possible to state that the population of service users for this project is not the same as the general population of standard psychological service users. In particular, the high presence of unemployed and retired people suggests that economic reasons may play an important part in the decision about accessing a psychological service. Consistent with this, about one third of users indicated that the main reason of access was that there was no charge for the service.

The other fundamental reasons are the proximity of the service, lack of knowledge of other services, and the waiting time for services. These results may be interpreted as the effect of the perception of distance that people experience with respect to other psychological services. Geographical distance may hinder access to the clinical centre, especially for the elderly who may have difficulties in transport and mobility. However, the distance may also be cultural or social, given the high percentage of people who did not know where to go to ask for assistance. Furthermore, some users stated that there were long waiting lists that prevented the access to public services, confirming the idea that there is a non-intercepted psychological requirement in the general population.

In order to improve the service access, it is important to clarify which of the two factors, no charge or proximity, are most relevant for this population. The PGWBI scores indicate that the average level of psychological well-being of users was low, compared with the normative values. Such a finding could confirm the presence of

![Figure 3 PGWBI subscales scores (N users = 416; Italian Gen. Pop. Average from [18]).](image)

![Figure 4 Presented problem (%) (N = 1,775).](image)
a psychological suffering in the sample of users, suggesting the need for a psychological intervention.

Most users decided to request the consultation after hearing about the project on the news, after reading the leaflets or after hearing about it by word-of-mouth. It is likely that these subjects were already aware that a psychological consultation would be helpful for them. Others had an external motivation and requested the access following a chemist or physician’s suggestion.

The problems that were mainly presented were family and couple problems, followed by anxious and depressive symptoms and the difficulties of managing a life situation: 41.2% were redirected to territorial services, 36.8% were resolved, and 22.1% dropped out. After the series of meetings a high proportion of these problems (78%) were either resolved or redirected to specific territorial services; however, the presence of a 22% drop-out rate is a level of treatment failure that is consistent with findings elsewhere in psychological interventions literature. Scientific literature reports that the proportion of clients who ended their psychological treatment because they were dissatisfied varied from 8% [19] to 34% [20], and a previous meta-analysis has suggested that the drop-out rate increases for people from lower income groups [21]. Furthermore, the fact that the service is free of charge can decrease the perception of efficacy, with a reverse of the cognitive dissonance theory in that if “a therapy [. . .] costs you a high proportion of your income, the therapy involves effort in the psychological meaning of term” [22], p. 165. Therefore, some people may perceive that a low effort reduces the perception of a treatment’s validity and therefore results in a drop-out.

When the overall results are considered, the data suggest that the service was helpful for many people even if the comparison with other services is difficult to make because of the different settings and sample characteristics.

The results obtained have allowed the authors to provide preliminary answers to the paper research questions. The service provided by the project appears to be very valuable for the general population and there was a wide take-up of the service. Typical users were females with, importantly, a prevalence of retired and unemployed people; we have found some differences between that population and general psychological services users. The preliminary results concerning the efficacy seem to be promising, even if further studies are required.

The study presents some limitations as there is no control group which could allow a full comparison of the outcome, and even if results concerning efficacy are promising, further investigations are required. The main outcome measure is provided by clinicians themselves and may therefore be biased by the professionals’ prejudices, which may have increased positive results, with a bias related to social desirability. There could be many variables that influence the results obtained, depending on the complexity of the setting and on the service itself; for example, the location of the chemist, the professional ability of the individual psychologist, and the relationship between the pharmacist and the customers.

Conclusions
The interest and participation of the population in the “Psychologist in the Neighbourhood” service was high. The users presented different characteristics from those of other psychological services, allowing the interpretation that this represents an unexpressed request for psychological support. In particular, there were fewer workers and more retired and unoccupied people. Free access and proximity to home were the main reasons for accessing this specific service. Many subjects were redirected to appropriate services, while about a third of the sample faced and resolved their problem with the psychologist at the chemist’s shop. Outcome measures, even if based only on a professional’s judgement, are encouraging.

The results demonstrate the effectiveness of bringing psychological support nearer to citizens, in particular to those who cannot afford a psychological consultation, therefore reducing socio-economic inequalities.

Competing interests
The authors declare that they have no competing interest.

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Authors’ contributions
EM was the research coordinator and he designed the study with GC. FP and EL analyzed data. CAB supervised the research and report process. All authors contributed to text development. All authors read and approved the final manuscript.
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