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LAY COUNSELING:  
A PRELIMINARY SURVEY OF WHO, WHAT AND HOW

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ABSTRACT

The results of a preliminary survey of lay counseling are presented. Lay counseling is a concept which the author has previously defined and discussed in this journal. Now data are brought to bear in elaborating the nature of this phenomenon which is a vital element of the mental health maintenance and rehabilitation process. The survey included the types of problems which are the subject of lay counseling, the responses to them, the relation of the lay counselor to the recipient, the effectiveness and other characteristics of the activity which are presented.

Prevention of a wide range of interpersonal and intrapersonal problems which are within the purview of the various human service professions has been gaining acceptance both in terms of professional philosophies and in pragmatic demonstrations (Albee and Joffe, 1977; Bloom, 1981; Forgays, 1978; Gilbert, 1982; Joffe and Albee, 1981; Klein and Goldston, 1977; Roskin, 1980). Prevention is both a matter of timing of aid as well as the form of the activity. Often the form of the preventive activity has its base in the self-help model with the professional acting as facilitator or consultant (Borman, 1975; Katz and Bender, 1976). Seaberg (1979) has pointed out that beyond this level of conception of preventive activity is an even more fundamental level of interpersonal helping which occurs naturally in the course of social interaction and involves no professionals at all, namely, "lay counsel-

ing." A working definition of lay counseling was proposed". . . as the interaction between two or more individuals where at least one individual, without training for the role and without organizational auspices, attempts to help the other(s), predominantly through verbal means of an intuitive or unspecified origin, to understand, to cope with, or to modify problems of psychosocial functioning where the counselor is not a party to the problem" (Seaberg, 1979:511). The major point was that lay counseling as defined is a natural activity which probably produces some of the same benefits as does professional counseling, probably always to some degree accompanies the professional helping process, and to some unknown extent supplants the need for professional counseling services. In other words, lay counseling is the first line of preventive activity involving a second party in assisting another person with their intrapersonal and interpersonal problems.

Though gaining in recognition by human service professionals, almost nothing is known empirically about lay counseling - who engages in it, what is the content of the interaction, how is the help delivered, and so on. This article is a report of a preliminary survey aimed at providing some beginning answers to these and other important questions.

### Methodology

A semi-structured survey questionnaire was developed to provide information about several demographic characteristics of the respondents, the nature of the social networks with whom they interacted, possible sources of their model of providing help as a lay counselor, who shared problems with them, the type of problem(s), their response(s) as a means of providing help, their perceived effectiveness of the lay counseling, how often this activity occurred, how rewarding the respondent found the role of lay counselor; then, shifting roles, a series of similar questions were posed for the situation where the respondent was sharing their problem(s) with someone else who was acting as the lay counselor. A number of the questions were open-ended - type of problem(s), response(s) as a means of providing help, and so on - to provide a means of

capturing unique information. Other questions were of a fixed-alternative format. The questionnaire was administered by an interviewer who read the questions and recorded the answers.

The sampling design called for a purposive sample determined by three characteristics - age, sex and race. It was anticipated the level of lay counseling activity and/or its form might vary based on these characteristics. The objective was to obtain a sample equally distributed by sex, equally distributed over the age ranges of 21-40 years, 41-60 years, and 61 years and over, and distributed according to the White/Black proportions of the community in which the survey was conducted, a community of about 200,000 people. As can be seen from Table 1 the 130 respondents to the survey met the design characteristics quite closely.

## Findings

### The Respondents

As with any survey one of the first questions is what were the characteristics of the respondents. Obviously, these might affect the results. A sample highly biased on a particular characteristic might skew the results one way or another. While the intent of this preliminary study was not to attempt a completely representative sample, it was important to obtain a diversity in basic demographic characteristics. It appears that objective was attained. The 130 respondents were split evenly with regard to sex, 65 female and 65 male. Thirty-seven percent were in the 21-40 age group, while 31.5 percent were in each of the other age groups, 41-60 and 61+. Racially, 73 percent of the respondents were White and 27 percent Black.

The educational attainment of the respondents was fairly well distributed, although there was a slight overrepresentation in the higher attainment categories. Sixteen and a half percent of the respondents had less than a high school education, 26 percent were high school graduates, 26.8 percent had some college or technical school education beyond high school, and 30.7 percent were college graduates (some of whom had done grad-

Table 1

Sample Number and (Percent Difference from Community Distribution) Per Characteristic

Age Range	Black		White		Total
	Female	Male	Female	Male	
21-40	n=9 (-.017)*	n=7 (+.022)	n=15 (-.066)	n=17 (-.121)	n=48
41-60	n=8 (+.056)	n=4 (-.039)	n=13 (-.029)	n=16 (-.035)	n=41
61 +	n=4 (-.039)	n=3 (+.017)	n=16 (+.095)	n=18 (+.156)	n=41
Total	n=21	n=14	n=44	n=51	n=130

\* The percentage in this category for the sample minus the percentage in this category for the community.

uate study and held graduate degrees).

For some of the respondents, their indication of occupation probably pertained to former occupations since 16.9 percent were beyond 65 years of age. Thirty-one and a half percent were in the professional-technical and manager-administrator categories, 13.4 percent were in the salesworkers and clerical categories, 7.1 percent were in the craftsmen and transport operatives categories, 24.4 percent were in the service-private household-laborer categories, 22 percent were in the other category, and 1.6 percent gave no occupation. Of course, being a sample from an urban area, there were no respondents who indicated farm related occupations.

The income of the respondents was spread over a fairly broad range with a substantial proportion of the respondents being in the lower income categories. Twenty-nine and a half percent reported incomes below \$8,000, the same percentage were in the \$8,000 to \$13,999 range, 21.3 percent were in the \$14,000 to 25,999 range, and 19.7 percent were in the \$26,000 and above category.

The respondents also were asked if they were a "reasonably active" member of a religious organization. Thirty-five percent reported a Protestant affiliation, 13.3 percent a Catholic affiliation, and 7.5 percent other affiliations. A sizeable proportion, 44.4 percent, reported not having an active religious affiliation.

#### The Respondent as Lay Counselor - Types of Problems Discussed

An attempt was made to have the respondents distinguish between their lay counseling activities which dealt with "everyday problems" and those that dealt with "serious problems." On the questionnaire everyday problems were illustrated as "the frustration of getting a traffic ticket when late for an appointment, having a child misbehave in public, having someone treat you rudely, and so forth." Serious problems were illustrated as "the loss of a job, a major health problem, a marriage difficulty, a constantly rebellious child, and

so on." Further, to help preserve the lay counseling role as a somewhat objective function, the respondents were asked to not consider problems where they were a party to the problem, i.e. ". . . a disagreement with a friend or neighbor, or a disagreement with your spouse. In other words, limit your thinking to problems which other persons share with you or you share with them where disagreement between the two of you is not the problem." The concern in all of this was to try to learn if responses to less serious problems were any different than those to more serious problems when the respondent was able to be more objective as a lay counselor by not being involved intimately in the problem.

As can be seen in Table 2 the respondents may not have distinguished well between everyday and serious problems as intended by the study design. At the same

Table 2

Percentage of Respondents With Whom  
Each Type of Problem Was Discussed

Type of Problem	Everyday	Most Serious
Marital/Divorce	25.8%	19.2%
Parenting/Child Rearing	33.9%	5.4%
Physical Health	25.0%	7.7%
Financial	56.5%	7.7%
Home Maintenance & Services	12.9%	0.0%
Substance Abuse	3.2%	2.3%
Work	42.7%	5.4%
Transportation	21.0%	0.0%
Educational	15.3%	2.3%
Personal Relationships	49.2%	6.9%
Mental Health/Depression	8.9%	6.2%
Unemployment	2.4%	6.9%
Death of a Family Member	0.0%	3.8%
Other	26.6%	9.2%
None (so stated)	0.0%	17.0%

time the respondents may have been describing subtle variations in the relative seriousness of problems for which they used the same categorical label when responding to the everyday problem query and the most serious problem query. That is, "marital" problems might range from a momentary disagreement with ones spouse to adultery and abandonment by ones spouse. The questionnaire was not designed to document these variations except as the respondent so designated them.

As the respondents viewed everyday problems the most frequent typed shared with them were financial, personal relationship, work, and parenting/child-rearing. These were in response to an open-ended query where the respondent could list as many everyday problems shared with them as they could recall.

On the subject of serious problems the respondents were asked to describe the most serious problem anyone had shared with them within the last few months. Thus, only one problem per respondent was listed. From Table 2 it is apparent marital/divorce problems were the most common theme. Many respondents did not consider that a serious problem had been shared with them, 17.0 percent. Financial problems, physical health, personal relationships, unemployment and mental health/depression were the next most common categories.

Without regard to the issue of the comparative seriousness of the type problem shared with the lay counselor, it is evident that a wide range of problem types are shared and that a significant amount of lay counseling occurs.

#### The Respondent as Lay Counselor - Responses to Problems

One of the primary interests of this investigation was how people respond once they are cast in the lay counseling role. The types and frequency of responses to the everyday problems and most serious problems are presented in Table 3. The percentages cited are the percent of respondents who claimed to have used a particular type of response to a general category of problem. As can be seen the most frequent responses to the



everyday problems were: listen/provide for ventilation of feelings, give advice, encourage, compare to experiences of others, and explore cause of problem.

Table 3

Percentage of Respondents Who Used Each Type of Response

Type of Response	Everyday Problem	Most Serious Problem
Listen/Provide for Ventilation of Feelings	58.4%	40.4%
Give Advice	57.6%	34.9%
Encourage	44.0%	45.0%
Compare to Experience of Others	44.0%	16.5%
Evaluate Alternatives	12.8%	22.0%
Explore Cause of Problem	24.8%	22.0%
Assess Personal Strengths	1.6%	8.3%
Ignore	4.0%	0.0%
Refer to Community Resource	7.2%	15.6%
Offer Personal Resources	4.0%	14.7%
Encourage Acceptance of Problem	4.8%	8.3%
Confrontation About Responsibility for Problem	4.8%	4.6%
Other	8.5%	11.0%

The most frequent responses to the most serious problem in recent months, not dissimilar from those used in relation to everyday problems, were: listen/provide for ventilation of feelings, give advice, and explore cause of problem, but also include: refer to community resources and offer personal resources. The latter two responses may relate to the lay counselor's assessment of the severity of the problem situation; in the first instance that it is desperate enough to require specialized professional services, and in the second instance that their action is an emergency stop-gap or a means of making them feel they had done everything possible. Interestingly, almost half of each of the two resource responses were in relation to the marital/divorce problem category. For the referral response this seems quite appropriate. The specific

forms of personal resource allocation to these problems is not clear.

Generally speaking the types of responses are within the range of typical human interactional techniques which might be anticipated either intuitively or as a retrospect from the theory of various counseling and therapy disciplines. The "ignore" category of response was left in the categorization rather than being collapsed in the "other" category to demonstrate that this response possibly unique to lay counselors did not occur often, and then only in relation to everyday problems. Some of the even more unique responses which were collapsed in the "other" category included: prayer, meditation, remaining objective, transmittal of mystic power, and distraction.

#### The Respondent as Lay Counselor - Relationship to Recipient of Counseling

What was the relationship of the lay counselor to the recipient of their counseling? These data are presented in Table 4. The most common relationship for either everyday problems or most serious problem was a friend. For everyday problems the next most frequently identified relationships were the lay counselor's co-workers, children, spouse, acquaintances, siblings, and parents in that order. In other words, non-family members (friends and coworkers) were most often mentioned as sharing everyday problems with the lay counselors; followed by members of their family of procreation (children and spouse), acquaintances (more casual relationships with non-family members), and finally members of their family of origin (siblings and parents).

In the sharing of a most serious problem friends of the lay counselor account for almost 60 percent of the relationships with the percentages for other types of relationships precipitously less. This suggests some differentiation in the choice of the type of problem the recipient of the counseling chooses to share with the lay counselor. That is, family members are more likely to share everyday problems than serious problems or the respondent is more often a party of the

Table 4

Percentage of Respondents Who Counseled Persons  
With Each Type of Relationship to Them

Relationship to Lay Counselor(Respondent)	Everyday Problem	Most Serious Problem
Spouse	33.1%	4.6%
Children	43.1%	6.4%
Boy/Girl Friend	6.9%	.9%
Parents	23.8%	2.7%
Coworkers	53.1%	9.3%
Siblings	24.6%	10.1%
Acquaintances	26.1%	3.7%
Friends	83.1%	58.7%
Other Relatives	13.8%	2.7%
Others	13.8%	.9%

serious problem (a constraint placed on the respondent at the beginning of the questionnaire).

The Respondent as Lay Counselor - Characteristics of Activity

The most common medium for the lay counseling activity was in face-to-face interaction - 83 percent for everyday problems, 75 percent for the most serious problem - with the remainder being via telephone.

The frequency of lay counseling on everyday problems was fairly high with 38.5 percent of the respondents reporting such activity once a day or more often. Forty-one and a half percent reported such activity

less than once a day, but at least once a week; while 20 percent claimed less than once a week for such activity.

Once an everyday problem was shared with the lay counselor discussion of it continued daily or several times per week about 36 percent of the time; less often than weekly, but more than one time only about 40 percent of the time; and one time only about 24 percent of the time.

Typically, serious problems were discussed about 6 times (median = 5.93 times) over a 30 day period (median = 30.19 days).

#### The Respondent as Recipient of Lay Counseling - Types of Problems Shared

As mentioned earlier, recognizing that lay counseling activity will often be a reciprocal process - the same person will sometimes be providing counseling to others and at other times be receiving counseling from others - a series of questions in the survey dealt with the respondent as the recipient of lay counseling. This and the next several subsections will deal with descriptions of the respondent in that role.

The respondents were asked, in an open-ended format, (1) what types of problems they had discussed with someone else recently (no distinction as to severity), and (2) from those listed, the one type of problem they considered most serious. Those data are presented in Table 5. A fairly full range of problems were shared by the respondents with another person acting as the lay counselor. In the listing, undifferentiated as to severity, the most commonly shared problems were those which focused on work, finances, personal relationships, physical health, and parenting/child-rearing. When selecting a most serious problem shared the most common types of problems mentioned were quite similar with the exception of financial problems, but the order changed slightly. The most often mentioned among the most serious problems was personal relationships, followed by physical health, parenting/child-rearing, work and others less often mentioned. Ten percent of the respon-

Table 5

Percentage of Respondents Discussing Each Type  
of Problem With Their Lay Counselor

Type of Problem	Undiffer- entiated	Most Serious
Marital/Divorce	11.6%	5.6%
Parenting/Child-Rearing	21.1%	12.2%
Physical Health	28.4%	13.3%
Financial	36.8%	6.7%
Home Maintenance/Services	8.4%	0.0%
Substance Abuse	2.1%	1.1%
Work	41.1%	11.1%
Transportation	11.6%	1.1%
Educational	12.6%	5.6%
Personal Relationships	30.5%	16.7%
Mental Health/Depression	9.5%	6.7%
Unemployment	11.6%	3.3%
Death of a Family Member	4.2%	3.3%
Other	14.7%	3.3%
None (so stated)	0.0%	10.0%

dents claimed to have not shared a most serious problem. A major change in shifting emphasis to most serious problem shared was that financial problems are much less often considered the most serious problem.

In comparing the most serious problems the respondents shared with others to those shared with them by others (Table 2), there is a rather dramatic difference in regard to marital/divorce problems and financial problems. When the respondents were acting as lay counselors these two problems were the most common problems presented to them, but when the roles shift these two problems are much less often mentioned. The possibility exists that if the differences are not genuine, they can be attributed to the interviewing process and some perceived taboo about these problems on the part of the respondents.

The respondents were not asked to identify response techniques used by their lay counselors. It seemed unreasonable to ask the respondent to cast themselves into the motivation of the complementary role, and probably highly unreliable. However, they were queried about the nature of their relationship with their lay counselors.

#### The Respondent as Recipient of Lay Counseling - Relationship to Lay Counselor

Similar to the earlier findings when the roles were reversed, the respondent's lay counselor for the most serious problem shared in the last few months was often a friend, 48.2 percent. The next most common relationship of lay counselor to recipient (respondent) was a spouse, 18.5 percent; followed much less often by siblings (8.6 percent), coworkers (7.4 percent), boy/girl friend (6.1 percent), parents (3.7 percent), others (3.7 percent), children (2.5 percent), and acquaintances (1.2 percent).

#### The Respondent as Recipient of Lay Counseling - Effectiveness

The respondents were asked how effective they thought receiving lay counseling was in helping them with the particular most serious problem they had shared. The vast majority, 65.4 percent, felt it had been moderately to very effective (moderately = 43.2 percent, very = 22.2 percent). Of those not giving a positive evalu-

ation, 25.9 percent felt the lay counseling was only slightly effective, while 8.7 percent felt it was simply not effective. This seems to be a fairly positive endorsement for lay counseling. As with any form of helping the meaning of the process may be as important as the absolute result.

### The Respondent as Recipient of Lay Counseling - Characteristics of Activity

Again, the most common medium of the lay counseling activity was in face-to-face interaction, 78.1 percent, with the remaining 21.9 percent being via telephone.

The frequency of the lay counseling activity was slightly less when the respondent was the recipient of the counseling rather than the counselor with 25.9 percent being daily or more often. Fifty-eight percent was less often than daily, but at least once a week; and 16.1 percent was less than once a week.

Once the respondent had shared their problem with a lay counselor the discussion of the problem continued for a substantial period of time. The activity continued for a month or more for 71.2 percent of the respondents, two to three weeks for 22.5 percent, and a week or less for only 6.3 percent.

Respondents were asked if at the time of the lay counseling activity they also were receiving professional help. Only 12.3 percent were. Of those, most were seeing a physician or psychiatrist.

### Interactions Between Variables

All of the preceding results are of the most simple descriptive form. Of course, the major objective of social science research is to discover and interpret the interactions which exist between variables, ultimately leading to casual explanations of variation in the phenomenon under study. This search for interactions in exploratory research must, however, be tempered by an assessment of the quality of the data, the size and

representativeness of the sample, and other considerations, lest unwarranted interpretations are proffered, and worse, utilized in some form of action. In this instance, a large number of interactions between variables were examined using crosstabular procedures and appropriate tests of statistical significance. For example, the interaction between the respondent characteristics of age, sex, race, educational attainment, income, and religious participation and all of the variables described in the eight preceding subsections were examined. Likewise, interactions between types of problems and types of responses, between types of problems and effectiveness, between types of responses and effectiveness, between types and responses and relationship to the respondent, between effectiveness and simultaneous receipt of professional help on the same problem, and so on. In every instance, the number of observations were less than five for a sizable proportion of the cells generated in the crosstabulation. Thus, what some might consider "trends" in the interaction of the variables often were based on as few as two observations per cell which also represented 20 percent of the observations for a particular category. Interpretation of such results seem indefensible. Surely, some collapsing of categories for a particular variable might increase the number of observations per cell, but the result too often seemed to be variable categories which were meaningless because they were insufficiently distinctive. For these reasons interactions between these variables will not be reported in this preliminary research, rather they will await the next stage of this research which will utilize a larger sample and redefined, fixed-alternative categories for the critical variables.

### Summary

What have we learned from this preliminary survey on lay counseling? First, these data suggest that lay counseling is an activity in which almost everyone is involved in some extent. Every respondent reported involvement as a lay counselor on "everyday problems." Most, 83 percent, reported such activity in relation to a "most serious problem." When the respondent was



on the receiving end of the lay counseling, all reported using lay counseling for problems undifferentiated as to severity and 90 percent for a "most serious problem." At the same time only 12.3 percent of the respondents who were using lay counseling on a "most serious problem" were simultaneously receiving professional help with that problem. All of this supports the original contention that lay counseling is probably a vital element in the maintenance of mental health. Exactly how vital it is - that is, how effective it is alone and how effective when paired with professional help - is yet to be determined.

When the respondent was acting as lay counselor the most commonly shared everyday problems were financial, personal relationships, and work related problems. The most common serious problem was marital and/or divorce. The primary responses to the shared problems, regardless of severity, were to listen (thus providing for ventilation of feelings), to give advice and encouragement, to try to provide a perspective by comparing the problem to the experiences of others, and to explore causes of the problem. Friends, co-workers, and children of the respondent were the types of persons most often using the respondent as a lay counselor for everyday problems, while friends predominated when serious problems were the focus of the activity. Typically, the lay counseling activity occurred in face-to-face interaction; was of shorter duration for everyday problems, but longer for serious problems.

When the respondent was the recipient of lay counseling the most common problems undifferentiated as to severity were work related, financial, personal relationships, physical health, and parenting/child-rearing. Among the most serious problems for which they sought lay counseling, personal relationships, physical health, and parenting/child-rearing were the most frequent. Friends were the lay counselors most often when the respondent was receiving lay counseling, with spouses a distant second in frequency. Almost two-thirds of the respondents found this activity to be moderately or very effective in helping them with their problems. And, the other characteristics of the activity were quite similar to those found when the respondent was the lay

counselor.

One curious issue to arise from this research was the very low frequency with which substance abuse (either alcohol or drug) was the subject of lay counseling. The high frequency of alcoholism in our society would suggest it might naturally occupy a more prominent place among the topics of lay counseling. Is there a taboo about the subject among friends? Is it disguised by being the basis for many of the marital and work related problems? Is the low frequency in this study simply an artifact of a survey instrument which is insensitive to this problem? These and related questions will have to be dealt with in future research.

### Future Research

The agenda for future research on this subject is substantial. First, the present survey ought to be replicated utilizing a much larger probability sample and measurement procedures refined from the present experience. On the latter, for example, the use of fixed-alternative responses to most variables seems feasible given what was learned from the open-ended approach, and the attempted distinction between everyday and serious problems should be dropped in favor of a seriousness rating for each type of problem included in the problem variable. The larger more representative sample will provide the basis for analyses of potentially important interactions between variables. Such a survey should provide a sound foundation of information on the incidence and nature of lay counseling.

Second, much more detailed studies of the lay counseling process ought to be attempted using pairs of lay counselors and recipients of lay counseling with the objective of not only surveying the process in greater detail from both perspectives, but also possibly systematically observing it directly.

Third, the extent and characteristics of lay counseling received by those who use professional counseling compared to those who do not ought to be investigated.

The list could go on but this seems a good begin-

ning agenda. This vital resource to maintaining mental health should not be ignored any longer if mental health professionals want to understand the total process, for only an undetermined proportion of it can be attributed to professional counseling. As the author has stated clearly in a previous work (Seaberg, 1979) the objective is not to learn about lay counseling so we can make it better (after all its naturalness may be its greatest asset), but to add to our understanding of its role in the total process of developing and maintaining mental health.

### References

- Albee, George W. and Justin M. Joffe, Editors. The Issues: An Overview of Primary Prevention, Hanover New Hampshire: University Press of New England, 1977.
- Bloom, Martin. Primary Prevention, The Possible Science, Englewood Cliffs, New Jersey: Prentice-Hall, 1981.
- Borman, Leonard D., Editor. Explorations in Self-Help and Mutual Aid, Evanston, Illinois: Center for Urban Affairs, Northwestern University, 1975.
- Forgays, Donald G. Primary Prevention of Psychopathology, Hanover, New Hampshire: University Press of New England, 1978.
- Gilbert, Neil. "Policy Issues in Primary Prevention," Social Work, Vol. 27, No. 4, 1982: 293-297.
- Joffe, Justin M. and George W. Albee, Editors. Prevention Through Political Action and Social Change, Hanover, New Hampshire: University Press of New England, 1981.
- Katz, Alfred H. and Eugene I. Bender, Editors. The Strength In Us, Self-Help Groups in the Modern World, New York: New Viewpoints, 1976.

Klein, Donald and Stephen Goldston. Primary Prevention: An Idea Whose Time Has Come, Rockville, Maryland: National Institute of Mental Health, 1977.

Roskin, Michael. "Integration of Primary Prevention in Social Work Practice," Social Work, Vol. 25, No. 3, 1980: 193-194.

Seaberg, James R. "Lay Counseling: The Basis of Prevention in Mental Health," Journal of Sociology and Social Welfare, Vol. 6, No. 4, 1979: 509-522.