COUNTERPART

Umir Nuri
Rainbow of Life
Child Survival Program, Uzbekistan

Evaluating the Feasibility of Village-Based Pharmacies in Karakalpakstan, Uzbekistan

Prepared by

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Part One: Introduction

Section 1.1: Background

In the Takhtakupir and Nukus rayons (or districts) of Karakalpakstan, an autonomous region of Uzbekistan, respiratory complications, infectious and parasitic conditions, and diarrheal disease pose grave threats to child health, serving as the major contributors to the death of children under five. The *Umir Nuri* (Rainbow of Life) Child Survival Program, a U.S. Agency for International Development (USAID) initiative, is working to lower infant and child mortality rates in these areas and to increase the capacity of local organizations to provide care.

To purchase medicines, many residents of Karakalpakstan travel long distances to pharmacies like the one shown above, which is located in the Nukus rayon center

Recognizing that access to medicines is vital to disease control, USAID's contractor, Counterpart International, is examining the possibility of establishing pharmacies in local villages. Currently, residents must travel long distances to obtain drugs, or must buy them from unreliable vendors. Village pharmacies would ensure customers receive affordable, high-quality drugs for their children and clear instructions for their use. By designing questionnaires to assess drug purchase practices and to determine the willingness of residents to pay for drugs, RTI is helping Counterpart to conduct a willingness-to-pay (WTP) survey and analysis to determine the feasibility of establishing and maintaining such pharmacies.

Section 1.2: Willingness-to-Pay Surveys

The willingness-to-pay survey is a well-established method used by social scientists to measure how much consumers value a commodity or service that either is not available in the market or is being provided by noncommercial agents at subsidized prices. The purpose of conducting WTP surveys is to gauge the potential demand for such products or services and the financial sustainability of providing them in a market situation within a certain price range. The results can also be interpreted as welfare gains to the consumers from making such products or services available to them.

Willingness-to-pay surveys usually are designed to ask people the maximum amount they are willing to pay for the product or service in question. Since such surveys hypothetically assume (or are contingent upon) the existence of a market for the product or service, they are also called contingent valuations.

The mean and distribution of WTP from survey data can be used to estimate the number of people likely to pay for the product or service if it were offered. This information can be further used to determine an appropriate price level that may generate sufficient revenues to allow this new activity to be financially sustainable. Based on the

characteristics of the respondents, it is also possible to project future changes in WTP and even to design interventions to influence WTP.

Part Two: Survey Implementation

Section 2.1: Survey Design

RTI designed two questionnaires for the willingness-to-pay study: an exit interview and a household interview. The exit interview was intended to capture households that recently (i.e., at the time of the interview) had a child experience either diarrhea or pneumonia. The household interview was intended to gather information from households that may have experienced these two diseases in the past. The main purpose of the overall survey was to find out the maximum amount of money that people were willing to pay for the availability, convenience, and reliability of getting prescription drugs at a nearby village pharmacy. These questionnaires also examined the current drug prescription and purchase practices in the region.

CSP staff along with Dr. Chao (RTI) visited Takhtakupir and Nukus rayons to examine how village-based pharmacies might best operate and to oversee survey design and

In designing the questionnaires, we followed the guidelines for WTP surveys developed by Foreit and Foreit (2001) to ensure the consistency and reliability of the survey. One method is to use probing and sequencing to ask several questions about respondents' willingness to pay for drugs. In addition, a final question about the maximum amount the respondent is willing to pay is added to extend the price range. For those who had paid for medicines in the past, we used the amount that they paid before as the starting point. For others, we used the market price of amoxicillin as the starting point.

Drafts of the survey questionnaires were forwarded to Counterpart's local office in Nukus for review and translation. A pretest was conducted in January 2003. Based on the results of the pretest, CSP staff worked with Dennis Chao to revise and finalize the questionnaires during his visit to Nukus in February 2003.

Section 2.2: Field Work

The training for interviewers (village health workers and field officers, as well as other staff members) took place on February 27–28, 2003. CSP staff members conducted the training. During the training, target communities for the survey were selected and a schedule of visits prepared.

Survey work started on March 3 and ended on March 18. The survey was conducted in two steps. First, the household interviews were conducted. The process took 5 days; 21 people were involved in carrying out the interviews. Overall, 802 interviews were conducted. During the second phase, the exit interviews were conducted with 320 mothers and other caretakers. Due to a lack of patients in the community health facilities on the interviewing days, an alternative method was used to find patients who had visited village clinics recently. Names and addresses of patients who had visited the village clinics within the past 2 weeks were collected from the health facilities. Using those lists of names, interviewers visited households and conducted interviews. Field officers and other program supervisory staff checked the questionnaires at the end of the day.

Section 2.3: Data Preparation

One major effort in preparing the data set for analysis was to combine several variables measuring the maximum willingness to pay (MWTP) into one variable. Depending on their experience with the two illnesses and whether they had paid for drugs before, respondents were asked about their MWTP in several different ways. Each answer was assigned a different code. We generated a combined file containing variables from the exit survey and the household survey, with a single variable representing the MWTP. With this combined file, we could analyze the whole sample or any subgroups.

We also redefined the data set to include willingness to pay for antibiotics only. In the original data set, there were 275 records responding to nonantibiotic drugs, such as oral rehydration salts (ORS). The costs of these nonantibiotic drugs were much lower than those for antibiotics; therefore, answers on MWTP from these records were not comparable to the rest of survey. In order not to bias the MWTP estimates for antibiotics, which were the major drugs in question, we eliminated all 275 records of nonantibiotic cases and concentrated on the other 1,969 records.

In the combined data set, we identified six types of respondents, as shown in Table 1.

Table 1. Categories of Survey Respondents

Respondent Categories	No. in Category
Child pneumonia:	
No case in household in the past	703
At least one case and paid for antibiotics	182
At least one case and did not pay for antibiotics	206
Child diarrhea:	
No case in household in the past	819
At least one case and paid for antibiotics	14
At least one case and did not pay for antibiotics	45

Part Three: Data Analysis

Section 3.1: Reliability and Validity of the Survey

The reliability of a willingness-to-pay survey is defined by how well respondents are able to answer questions about how much they are willing to pay for the commodity or service in question and the degree of "yea-saying" (i.e., giving an answer the respondent believes the interviewer wants to hear) in answering probing questions. In the current survey, all the respondents understood the willingness-to-pay questions and were able to answer them. Furthermore, there appeared to be no yea-saying problem since the answers to the maximum willingness-to-pay question were all greater than or equal to the highest price that the respondent had agreed to pay previously, as revealed by probing. The average amount of reported actual payments for one unit of antibiotic drugs was almost identical to the market price. This seems to be evidence that the survey results are reliable.

The validity of a willingness-to-pay survey is defined by how closely the willingness-to-pay results conform to the income level of the individual or household. The current survey shows strong and consistent evidence of a positive relationship between household income and willingness to pay for drugs. We present the results in the next section.

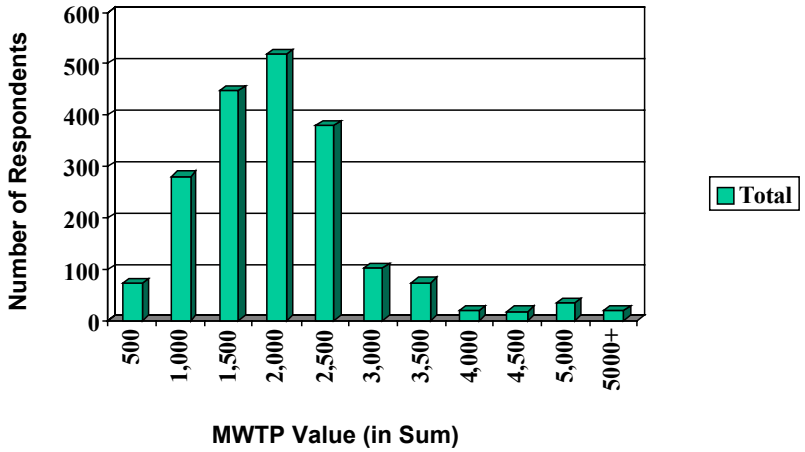
Section 3.2: Overall Level of Willingness to Pay

We first examine overall willingness to pay for antibiotic drugs. Table 2 and Figure 1 show the range and distribution of the maximum amounts that respondents were willing to pay (MWTP). Details of the statistical analysis are reported in Appendix A.

Table 2. Maximum Willingness to Pay (in Sum)

	Frequency	Mean	S.D.	Median	Minimum	Maximum
Overall	1,969	1,689	1,092	1,500	100	10,000
Pneumonia	1,091	1,734	1,122	1,500	100	10,000
Diarrhea	878	1,632	1,051	1,500	100	10,000

Figure 1. Distribution of MWTP



The overall mean value of the maximum amount that the respondents were willing to pay was 1,689 Sum. The fact that the mean WTP value for all respondents was substantially higher than the prevailing market price of a unit of antibiotics (at 1,320 Sum) was a primary indication that the villagers supported the idea of establishing village pharmacies and were willing to pay a premium for the convenience and reliability of village pharmacies. When examined separately, the differences in mean values of MWTP for diarrhea and pneumonia were small but statistically significant at the .039 level. This seems to suggest that in answering WTP questions, villagers were mainly responding to the antibiotic commodity itself and not to the purpose for which it would be used. Therefore, their expressed willingness to pay for antibiotics was similar, whether to cure diarrhea or pneumonia.

In the next sections, we provide a more in-depth analysis of willingness to pay, for different groups. We examine results from the pneumonia survey and the diarrhea survey separately.

Part Four: Analysis of Pneumonia Survey

Section 4.1: Analysis of the Whole Group

4.1.1 Willingness to Pay, by Illness Experience, Distance to Source, and Household Income

Table 3 shows the distribution of MWTP by illness experience, distance to source of drug, and household income. Details of the statistical analysis are reported in Appendix B.

Table 3. Pneumonia Maximum Willingness to Pay, by Illness Experience, Distance, and Income

Category	Frequency	Mean	S.D.	*F*-test	Sig. Level
Illness Experience				0.358	.550
No	703	1,719	1,127		
Yes	388	1,762	1,116		
Distance				9.122	.003
Village	562	1,635	1,151		
Outside	529	1,840	1,082		
Income				2.983	.007
Under 5,000	28	1,282	654		
5,000-15,000	327	1,631	1,179		
15,000-30,000	386	1,708	1,127		
30,000-45,000	226	1,837	1,100		
45,000-60,000	80	1,972	1,068		
60,000-100,000	34	1,957	755		
Above 100,000	10	2,360	1,325		

Illness Experience

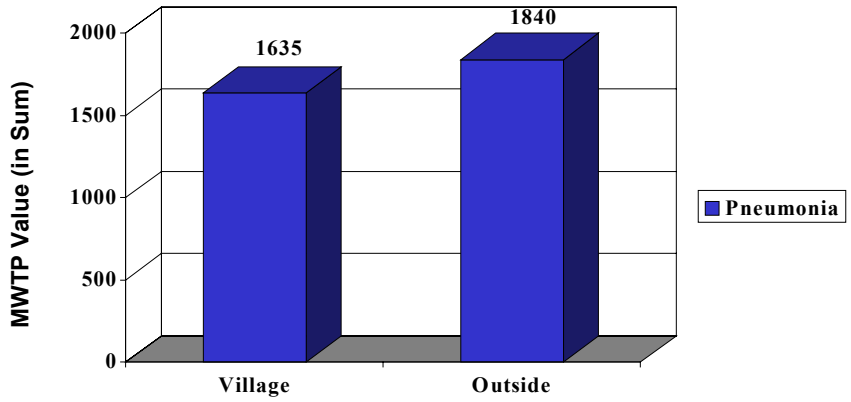
Sixty-four percent of the respondents had not experienced a case of child pneumonia in the household. The other 36 percent had experienced a child pneumonia case in the past. One might expect those who had experienced a child pneumonia case to express a higher MWTP. The results, however, showed a small and nonsignificant difference between the mean values of the MWTP of the two groups. This might be an indication that the seriousness of child pneumonia was well understood by those who had not yet experienced a case.

Distance to Source

Fifty-two percent of the respondents reported that they could obtain antibiotics within the village vicinity. The rest claimed that they had to travel to a rayon center or

Nukus City to obtain the same drugs. Since travel outside the village has money and time costs, one might expect that the latter group would be willing to pay a higher price for the opportunity to purchase the drugs in a village pharmacy. Results in Table 3and Figure 2 seem to support this hypothesis. There is a large and significant difference between the means of MWTP for the two groups. On average, those who had to travel outside the community to get the drugs were willing to pay 204 Sum more.

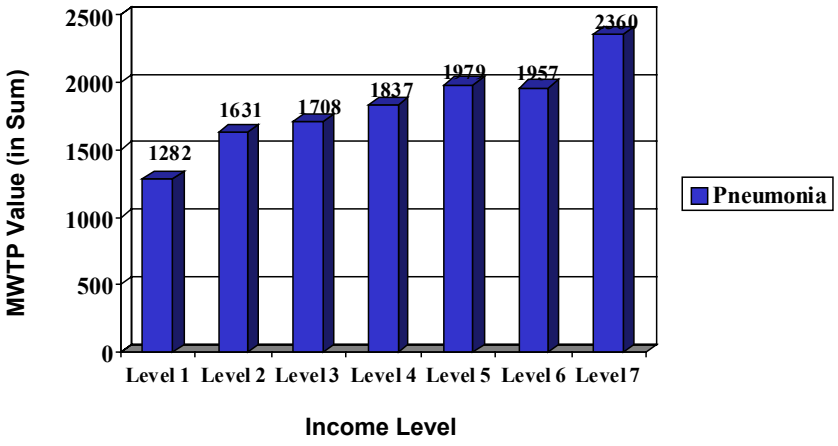
Figure 2. MWTP, by Distance, for Pneumonia



Monthly Household Income

Economic theory suggests that there is a positive relationship between WTP and household income. Results reported in Table 3 and Figure 3 reveal that there is a clear pattern between the monthly income of the household and the WTP: the higher the income, the higher the WTP. The *F*-test of all the means is significant at the .007 level.

Figure 3. MWTP, by Household Income, for Pneumonia



4.1.2 Determinants of Willingness to Pay

We carried out regression analyses to identify the main determinants of the willingness to pay and their individual and total impact on WTP. Table 4 presents the results of a regression analysis with three independent variables.

Table 4. Regression on the Determinants of WTP for Pneumonia Antibiotics

	Coefficients	S.D.	*t*-Test	Sig. Level	*R*-Square	*F*-Test
Model					.023	8.666
Constant	1,244.09	106.48	11.68	.000		
Income	115.50	29.37	3.93	.000		
Distance	210.32	68.29	3.08	.002		
Illness Experience	73.84	71.29	1.03	.300		

Both household income and the distance factor have the expected sign and are highly significant. The illness experience factor has the expected sign that those who had experienced the illness were willing to pay more. However, the coefficient is small and not significant. This seems to suggest that those who had no experience of child pneumonia were equally aware of its danger.

Section 4.2: Analysis of the Subgroup with Illness Experience

To further our effort to identify factors that are important in determining WTP, this section focuses only on those who had previous experience with child pneumonia cases. In our survey, 388 households had had child pneumonia cases in the past.

4.2.1 Willingness to Pay, by Distance, Income, and Payment

Table 5 provides the differences in mean values of WTP by distance, income, and whether the household had paid for medicine in the past. Details of the statistical analysis are reported in Appendix C.

Table 5. Pneumonia Maximum Willingness to Pay, by Distance, Income, and Payment

Category	Frequency	Mean	S.D.	F-test	Sig. Level
Distance				11.815	.001
Village	244	1,614	995		
Outside	144	2,012	1,259		
Income				1.369	.226
Under 5,000	8	1,393	935		
5,000-15,000	118	1,693	1,181		
15,000-30,000	131	1,667	1,055		

Category	Frequency	Mean	S.D.	F-test	Sig. Level
30,000-45,000	83	1,891	1,119		
45,000-60,000	33	1,917	1,025		
60,000-100,000	11	2,073	1,001		
Above 100,000	4	2,775	1,953		
Payment				20.834	.000
No	206	1,525	945		
Yes	182	2,030	1,231		

Distance to Source

Sixty-three percent of the respondents reported that they could obtain the antibiotic drugs within the village vicinity and the rest claimed that they had to travel to the rayon center or Nukus City to obtain the same drug. As shown in Table 5, the results again support the hypothesis that those who had to travel to a rayon center or to Nukus City to obtain a drug would be willing to pay more for the opportunity to purchase the same drug in a village pharmacy. There is a large and significant difference between the means of MWTP for the two groups. On the average, those who had to travel outside the community to get the drug were willing to pay 398 Sum more.

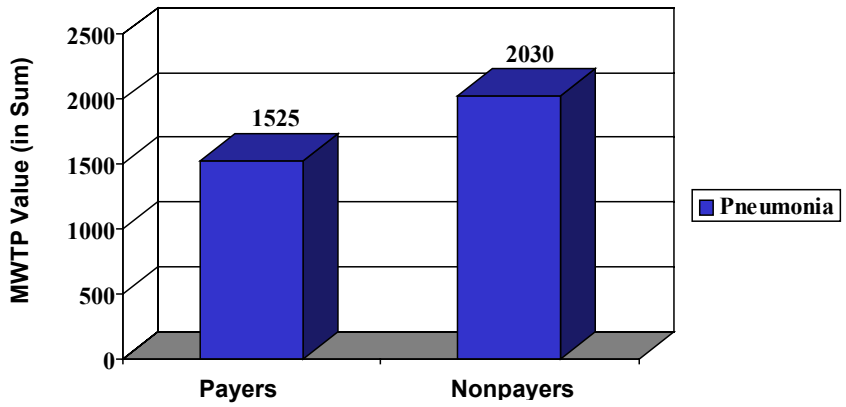
Monthly Household Income

Table 5 shows a clear pattern of positive relationships between the monthly income of the household and the WTP—i.e., the higher the income, the higher the WTP. The *F*-test of all the means is significant at the .226 level.

Payment for Medicine

Within this group, about half paid for antibiotics and the other half did not. Other WTP studies have shown that those who had not paid for services or commodities usually expressed a lower WTP. Our results support this hypothesis. Results in Table 5 and Figure 4 indicate that the mean differences of WTP in these two groups are large and significant. Those who actually paid for drugs, on the average, would be willing to pay 500 Sum more.

Figure 4. MWTP, by Paying Experience, for Pneumonia



4.2.2 Determinants of Willingness to Pay

Table 6 reports the results of the regression analysis of WTP. Income remains a strong and significant factor in determining MWTP. The distance variable still has the expected sign but is no longer significant. One the other hand, whether the respondents paid for medicine influenced how much they were willing to pay for drugs in the proposed village pharmacy. The coefficient for payment is larger and highly significant.

Table 6. Regression on the Determinants of WTP for Pneumonia Antibiotics

	Coefficients	S.D.	*t*-Test	Sig. Level	*R*-Square	*F*-Test
Model					.068	9.319
Constant	1,127.144	169.167	6.645	.000		
Income	123.911	47.510	2.605	.010		
Distance	50.408	164.050	0.307	.759		
Payment	476.573	158.796	3.001	.003		

Part Five: Analysis of Diarrhea Survey

Section 5.1: Analysis of the Whole Group

Analysis of the whole group from the diarrhea survey reveals results similar to those of the pneumonia survey, with minor variations.

5.1.1 Willingness to Pay, by Experience of Illness, Distance to Source, and Household Income

Table 7 shows the distribution of diarrhea MWTP by illness experience, distance to source of drug, and household income. Details of the statistical analysis are reported in Appendix D.

Table 7. Diarrhea Maximum Willingness to Pay, by Illness Experience, Distance, and Income

Category	Frequency	Mean	S.D.	*F*-Test	Sig. Level
Illness Experience				0.486	.486
No	819	1,625	1,049		
Yes	59	1,724	1,093		
Distance				1.643	.200
Village	455	1,588	1,102		
Outside	423	1,679	994		
Income				2.559	.018
Under 5,000	21	1,133	525		

Category	Frequency	Mean	S.D.	*F*-Test	Sig. Level
5,000-15,000	271	1,549	1,053		
15,000-30,000	304	1,608	1,000		
30,000-45,000	180	1,691	1,217		
45,000-60,000	68	1,925	996		
60,000-100,000	26	1,854	629		
Above 100,000	8	2,106	764		

Illness Experience

Again, the results of analyzing the diarrhea survey show a small and nonsignificant difference between the mean values of MWTP of the two groups.

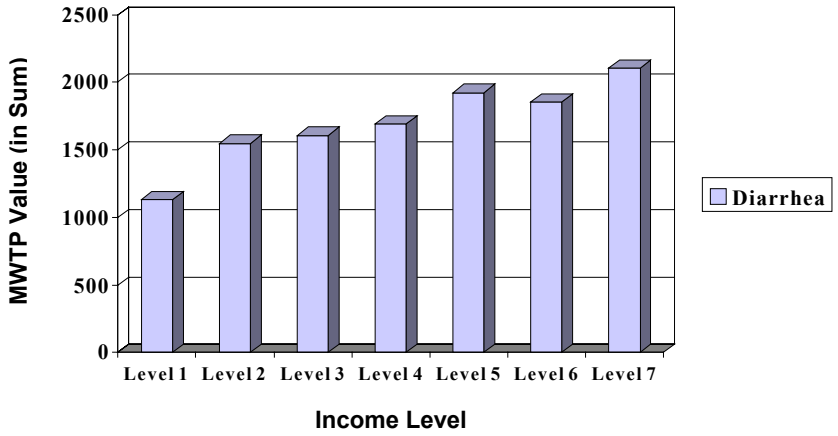
Distance to Source

As shown in Table 7, there is a large but not significant difference between the means of MWTP for those who could obtain the antibiotic drug within the village vicinity and those who claimed that they had to travel to a rayon center or to Nukus City to obtain the same drug. On average, those who had to travel outside the community to get the drug were willing to pay 91 Sum more.

Monthly Household Income

Results reported in Table 7 and Figure 5 again reveal a clear pattern between the monthly income of the household and the WTP; the higher the income, the higher the WTP. The *F*-test of all the means is significant at the .018 level.

Figure 5. MWTP, by Household Income, for Diarrhea



5.1.2 Determinants of Willingness to Pay

We carried out regression analyses to identify the main determinants of the willingness to pay and their individual and total impact on WTP. Table 8 presents the results of a regression analysis with three independent variables. All the coefficients have the expected sign but only income is significant. The income coefficient is similar to that from the pneumonia survey. This is another confirmation that the type of illness did not affect respondents' MWTP for antibiotics.

Table 8. Regression on the Determinants of WTP for Diarrhea Antibiotics

	Coefficients	S.D.	*t*-Test	Sig. Level	*R*-Square	*F*-Test
Model					.016	4.843
Constant	1,246.52	107.52	11.59	.000		
Income	108.03	30.76	3.51	.000		
Distance	85.82	70.60	1.21	.224		
Illness Experience	91.98	140.89	0.65	.514		

Section 5.2: Analysis of the Subgroup with Illness Experience

This section focuses only on those who had previous experience with at least one child diarrhea case. In our survey, there were 59 households that had had child diarrhea cases in the past.

5.2.1 Willingness to Pay, by Distance, Income, and Payment

Table 9 shows the differences in mean values of WTP by distance, income, and whether the household had paid for medicine in the past. Details of the statistical analysis are reported in Appendix E.

Table 9. Diarrhea Maximum Willingness to Pay, by Distance, Income, and Payment

Category	Frequency	Mean	S.D.	*F*-Test	Sig. Level
Distance				0.001	.972
Village	33	1,720	1,216		
Outside	26	1,730	939		
Income				0.949	.469
Under 5,000	1	1,500			
5,000-15,000	18	1,489	981		
15,000-30,000	21	1,804	1,175		
30,000-45,000	8	1,713	1,406		

Category	Frequency	Mean	S.D.	*F*-Test	Sig. Level
45,000-60,000	9	1,672	767		
60,000-100,000	1	3,300			
Above 100,000	1	3,500			
Payment for drugs				6.809	.012
No	14	1,089	595		
Yes	45	1,921	1,142		

Distance to Source

In this sub-sample, there is no difference between the means of MWTP for those who could obtain the antibiotic drug with in the village vicinity and those who claimed that they had to travel to a rayon center or to Nukus City to obtain the same drug.

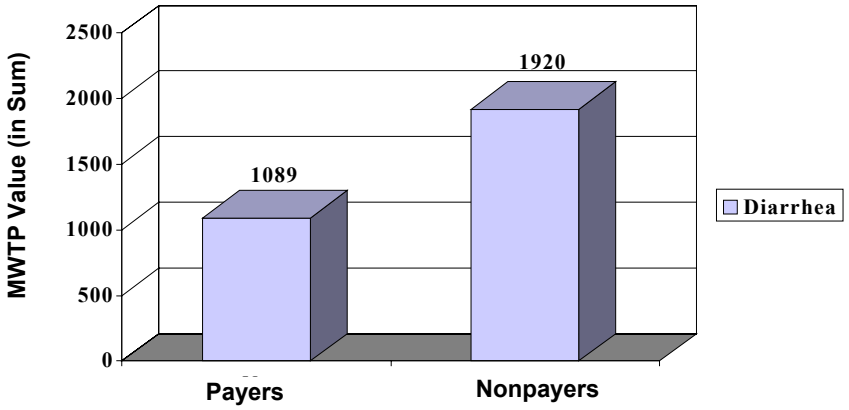
Monthly Household Income

There is still a clear pattern between the monthly income of the household and the WTP; the higher the income, the higher the WTP. However, the *F*-test of all the means is not significant.

Payment for Medicine

Results show that those who did not pay for services or commodities expressed a lower WTP. In Table 9 and Figure 6, the mean differences of WTP in these two groups are large and significant. Those who actually paid for drugs, on the average, would be willing to pay 832 Sum more.

Figure 6. MWTP, by Paying Experience, for Diarrhea



5.2.2 Determinants of Willingness to Pay

Table 10 reports the results of the regression analysis of WTP. The income coefficient remains in the same range as the earlier estimation, but it is not statistically significant. The distance variable is not significant. One the other hand, whether the respondent paid for medicine demonstrates again the strong influence on how much respondents were willing to pay for drugs in the proposed village pharmacy.

Table 10. Regression on the Determinants of WTP for Diarrhea Antibiotics

	Coefficients	S.D.	*t*-Test	Sig. Level	*R*-Square	*F*-Test
Model					.068	9.319
Constant	767.848	444.386	1.728	.090		
Income	122.029	114.995	1.061	.293		
Distance	-127.009	288.675	-0.440	.662		
Payment	812.082	338.618	2.398	.020		

Part Six: Summary and Conclusions

Section 6.1: Clear and Strong Willingness to Pay

From the analysis of the two surveys, the results clearly show a high willingness to pay for the convenience and reliability of buying antibiotics at a village pharmacy. From the whole sample to different subgroups, respondents consistently indicated that they valued having antibiotics available when needed and were willing to pay for them.

The fact that the mean MWTP values for the different groups were higher than the prevailing market price of antibiotics reflects how strongly people felt the need to have this opportunity.

Section 6.2: Factors Influencing Willingness to Pay

The results seem to suggest that the MWTP for antibiotics was not influenced by respondents' experience in dealing with the illness or the type of illness. On the other hand, whether the medicine could be obtained within the community seemed to be an important factor in determining how much a respondent was willing to pay. Those who had traveled to other rayon centers or to Nukus City to search for the medicine tended to favor a higher MWTP. For the group that had had experience with child pneumonia or diarrhea cases, whether they paid for the prescribed medicine turned out to be a very important factor in determining MWTP.

The most important and consistent factor was household income level. The regression coefficient for income level remained positive and statistically significant for almost all the subgroups that we examined. Furthermore, the coefficient consistently

stayed in the narrow range of 108 to 125. The pattern of a positive relationship between income level and MWTP is well supported by the survey. Given this relationship, it is reasonable to expect that future MWTP will rise as household income increases.

Section 6.3: Financial Sustainability of the Village Pharmacy

Since the mean value of MWTP was 1,689 Sum, which was 369 Sum higher than the commercial market price, there should be no shortage of demand if antibiotics were to be offered in village pharmacies at the same price as found in the market. If the price were set at 1,320 Sum, the distribution of MWTP (see Appendix A) suggests that at that price, 73 percent of our sample households would purchase antibiotics from a village clinic pharmacy. If the price of the antibiotic were set lower to reflect subsidies provided by the Child Survival Program, an even higher portion of the population would pay for them at a village pharmacy. For example, if the price were set at 660 Sum, then over 90 percent of the households would participate in such an arrangement. Given such high potential demand at the near-market price, there seems no doubt that, assuming the village pharmacy were run with reasonable efficiency, the financial sustainability of the village pharmacy would be assured.

Section 6.4: Improving the Welfare of the People

By introducing village pharmacies and offering the antibiotics, the CSP and the Ministry of Health would improve the welfare of the local population. In addition to the obvious benefits to child health, there would also be substantial consumer welfare gains. By calculating the difference between the MWTP and the actual price, it is possible to estimate the consumer surplus generated. For example, if the price were set at 1,320 Sum per unit of antibiotics, the total consumer surplus would amount to 1 million Sum. This number is derived by adding the amount of MWTP exceeding 1,320 Sum of all the individuals who had indicated that they would be willing to pay at least 1,320 Sum for antibiotics. This total consumer gain would double to 2 million if the price were set at 660 Sum.

Section 6.5: Policy Recommendations

The overwhelmingly positive results from our willingness-to-pay survey strongly support the establishment of pharmacies in village clinics. Having high-quality drugs available in the convenient setting of a village pharmacy would improve child survival and create consumer welfare gains. The strong potential demand for antibiotics at village pharmacies, together with uninterrupted supplies through donors' support and coordination, would almost guarantee the success and the financial sustainability of the village pharmacies.

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Appendix A

Statistics on Maximum Willingness to Pay

Statistics
MWTP

N	**Valid**	1969
	Missing	0
Mean		1688.6618
Median		1500.0000
Std. Deviation		1092.28214
Minimum		100.00
Maximum		10000.00

MWTP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**100.00**	3	.2	.2	.2
	150.00	1	.1	.1	.2
	170.00	1	.1	.1	.3
	200.00	5	.3	.3	.5
	250.00	7	.4	.4	.9
	260.00	1	.1	.1	.9
	280.00	1	.1	.1	1.0
	300.00	15	.8	.8	1.7
	350.00	6	.3	.3	2.0
	375.00	1	.1	.1	2.1
	400.00	14	.7	.7	2.8
	420.00	1	.1	.1	2.8
	450.00	15	.8	.8	3.6
	475.00	1	.1	.1	3.7
	480.00	1	.1	.1	3.7
	500.00	82	4.2	4.2	7.9
	520.00	2	.1	.1	8.0
	550.00	10	.5	.5	8.5
	600.00	16	.8	.8	9.3
	650.00	4	.2	.2	9.5
	660.00	6	.3	.3	9.8
	670.00	6	.3	.3	10.1
	680.00	4	.2	.2	10.3
	700.00	75	3.8	3.8	14.1
	750.00	1	.1	.1	14.2
	770.00	1	.1	.1	14.2
	800.00	24	1.2	1.2	15.4
	850.00	8	.4	.4	15.8

MWTP

		Frequency	Percent	Valid Percent	Cumulative Percent
	900.00	13	.7	.7	16.5
	920.00	7	.4	.4	16.9
	930.00	1	.1	.1	16.9
	950.00	22	1.1	1.1	18.0
	1000.00	98	5.0	5.0	23.0
	1050.00	3	.2	.2	23.2
	1200.00	38	1.9	1.9	25.1
	1250.00	1	.1	.1	25.1
	1300.00	10	.5	.5	25.6
	1320.00	32	1.6	1.6	27.3
	1325.00	1	.1	.1	27.3
	1330.00	7	.4	.4	27.7
	1350.00	169	8.6	8.6	36.3
	1360.00	2	.1	.1	36.4
	1370.00	4	.2	.2	36.6
	1375.00	1	.1	.1	36.6
	1380.00	1	.1	.1	36.7
	1400.00	63	3.2	3.2	39.9
	1450.00	14	.7	.7	40.6
	1460.00	2	.1	.1	40.7
	1500.00	396	20.1	20.1	60.8
	1550.00	2	.1	.1	60.9
	1560.00	1	.1	.1	60.9
	1600.00	19	1.0	1.0	61.9
	1650.00	1	.1	.1	62.0
	1700.00	12	.6	.6	62.6
	1710.00	9	.5	.5	63.0
	1720.00	5	.3	.3	63.3
	1750.00	25	1.3	1.3	64.6
	1800.00	27	1.4	1.4	65.9
	1850.00	2	.1	.1	66.0
	1900.00	4	.2	.2	66.2
	1980.00	17	.9	.9	67.1
	2000.00	351	17.8	17.8	84.9
	2100.00	4	.2	.2	85.1
	2150.00	1	.1	.1	85.2
	2200.00	7	.4	.4	85.5
	2250.00	1	.1	.1	85.6
	2300.00	14	.7	.7	86.3
	2350.00	1	.1	.1	86.3
	2400.00	1	.1	.1	86.4
	2500.00	75	3.8	3.8	90.2
	2550.00	5	.3	.3	90.5

MWTP

		Frequency	Percent	Valid Percent	Cumulative Percent
	2600.00	8	.4	.4	90.9
	2625.00	1	.1	.1	90.9
	2700.00	2	.1	.1	91.0
	2750.00	3	.2	.2	91.2
	2800.00	9	.5	.5	91.6
	3000.00	71	3.6	3.6	95.2
	3250.00	1	.1	.1	95.3
	3300.00	1	.1	.1	95.3
	3450.00	1	.1	.1	95.4
	3500.00	19	1.0	1.0	96.3
	3750.00	1	.1	.1	96.4
	4000.00	15	.8	.8	97.2
	4200.00	1	.1	.1	97.2
	4500.00	2	.1	.1	97.3
	5000.00	34	1.7	1.7	99.0
	6000.00	5	.3	.3	99.3
	7000.00	1	.1	.1	99.3
	10000.00	13	.7	.7	100.0
	Total	1969	100.0	100.0	

Appendix B

Statistical Analysis of Pneumonia Sample

Statistics

		EXPERIEN	DISTANCE	INCOME	MWTP
N	Valid	1091	1091	1091	1091
	Missing	0	0	0	0
Mean		.3556	.4849	3.1329	1734.2117
Median		.0000	.0000	3.0000	1500.0000
Std. Deviation		.47893	.50000	1.14609	1122.39025
Minimum		.00	.00	1.00	100.00
Maximum		1.00	1.00	7.00	10000.00

Frequency Table

EXPERIEN

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	703	64.4	64.4	64.4
	1.00	388	35.6	35.6	100.0
	Total	1091	100.0	100.0	

DISTANCE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	562	51.5	51.5	51.5
	1.00	529	48.5	48.5	100.0
	Total	1091	100.0	100.0	

INCOME

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	28	2.6	2.6	2.6
	2.00	327	30.0	30.0	32.5
	3.00	386	35.4	35.4	67.9
	4.00	226	20.7	20.7	88.6
	5.00	80	7.3	7.3	96.0
	6.00	34	3.1	3.1	99.1
	7.00	10	.9	.9	100.0
	Total	1091	100.0	100.0	

MWTP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	100.00	1	.1	.1	.1
	150.00	1	.1	.1	.2
	170.00	1	.1	.1	.3
	200.00	2	.2	.2	.5
	250.00	2	.2	.2	.6
	260.00	1	.1	.1	.7
	300.00	7	.6	.6	1.4
	350.00	3	.3	.3	1.6
	375.00	1	.1	.1	1.7
	400.00	5	.5	.5	2.2
	420.00	1	.1	.1	2.3
	450.00	13	1.2	1.2	3.5
	475.00	1	.1	.1	3.6
	480.00	1	.1	.1	3.7
	500.00	42	3.8	3.8	7.5
	520.00	2	.2	.2	7.7
	550.00	7	.6	.6	8.3
	600.00	10	.9	.9	9.3
	650.00	2	.2	.2	9.4
	660.00	3	.3	.3	9.7
	670.00	3	.3	.3	10.0
	680.00	2	.2	.2	10.2
	700.00	42	3.8	3.8	14.0
	770.00	1	.1	.1	14.1
	800.00	11	1.0	1.0	15.1
	850.00	8	.7	.7	15.9
	900.00	9	.8	.8	16.7
	920.00	3	.3	.3	17.0
	930.00	1	.1	.1	17.0
	950.00	12	1.1	1.1	18.1
	1000.00	51	4.7	4.7	22.8
	1050.00	3	.3	.3	23.1
	1200.00	21	1.9	1.9	25.0
	1250.00	1	.1	.1	25.1
	1300.00	10	.9	.9	26.0
	1320.00	17	1.6	1.6	27.6
	1325.00	1	.1	.1	27.7
	1330.00	3	.3	.3	28.0
	1350.00	77	7.1	7.1	35.0
	1360.00	1	.1	.1	35.1
	1370.00	2	.2	.2	35.3
	1375.00	1	.1	.1	35.4
	1400.00	39	3.6	3.6	39.0
	1450.00	9	.8	.8	39.8

MWTP

		Frequency	Percent	Valid Percent	Cumulative Percent
	1460.00	1	.1	.1	39.9
	1500.00	204	18.7	18.7	58.6
	1550.00	2	.2	.2	58.8
	1560.00	1	.1	.1	58.8
	1600.00	10	.9	.9	59.8
	1650.00	1	.1	.1	59.9
	1700.00	9	.8	.8	60.7
	1710.00	2	.2	.2	60.9
	1720.00	3	.3	.3	61.1
	1750.00	8	.7	.7	61.9
	1800.00	14	1.3	1.3	63.2
	1850.00	2	.2	.2	63.3
	1900.00	2	.2	.2	63.5
	1980.00	8	.7	.7	64.3
	2000.00	195	17.9	17.9	82.1
	2100.00	3	.3	.3	82.4
	2150.00	1	.1	.1	82.5
	2200.00	5	.5	.5	83.0
	2250.00	1	.1	.1	83.0
	2300.00	13	1.2	1.2	84.2
	2350.00	1	.1	.1	84.3
	2400.00	1	.1	.1	84.4
	2500.00	43	3.9	3.9	88.4
	2550.00	3	.3	.3	88.6
	2600.00	5	.5	.5	89.1
	2625.00	1	.1	.1	89.2
	2700.00	2	.2	.2	89.4
	2750.00	2	.2	.2	89.6
	2800.00	7	.6	.6	90.2
	3000.00	46	4.2	4.2	94.4
	3250.00	1	.1	.1	94.5
	3450.00	1	.1	.1	94.6
	3500.00	11	1.0	1.0	95.6
	3750.00	1	.1	.1	95.7
	4000.00	13	1.2	1.2	96.9
	4500.00	2	.2	.2	97.1
	5000.00	21	1.9	1.9	99.0
	6000.00	3	.3	.3	99.3
	7000.00	1	.1	.1	99.4
	10000.00	7	.6	.6	100.0
	Total	1091	100.0	100.0	

Mean Analysis

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
MWTP * EXPERIEN	1091	100.0%	0	.0%	1091	100.0%
MWTP * DISTANCE	1091	100.0%	0	.0%	1091	100.0%
MWTP * INCOME	1091	100.0%	0	.0%	1091	100.0%

MWTP * EXPERIEN

Report
MWTP

EXPERIEN	Mean	N	Std. Deviation
.00	1719.1110	703	1126.51517
1.00	1761.5722	388	1115.80603
Total	1734.2117	1091	1122.39025

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
MWTP * EXPERIEN	Between Groups	(Combined)	450761.765	1	450761.765	.358	.550
	Within Groups		1372687510.325	1089	1260502.764		
	Total		1373138272.090	1090			

Measures of Association

	Eta	Eta Squared
MWTP * EXPERIEN	.018	.000

MWTP * DISTANCE

Report
MWTP

DISTANCE	Mean	N	Std. Deviation
.00	1635.0089	562	1150.93845
1.00	1839.6030	529	1082.39866
Total	1734.2117	1091	1122.39025

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.

MWTP * DISTANCE	**Between Groups**	**(Combined)**	11406530.499	1	11406530.499	9.122	.003
	Within Groups		1361731741.591	1089	1250442.371		
	Total		1373138272.090	1090			

Measures of Association

	Eta	Eta Squared
MWTP * DISTANCE	.091	.008

MWTP * INCOME

Report
MWTP

INCOME	Mean	N	Std. Deviation
1.00	1281.7857	28	653.79266
2.00	1630.7798	327	1179.18765
3.00	1707.7073	386	1126.82285
4.00	1837.3009	226	1100.39155
5.00	1979.1875	80	1067.86651
6.00	1956.7647	34	755.09069
7.00	2360.0000	10	1325.14150
Total	1734.2117	1091	1122.39025

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
MWTP * INCOME	**Between Groups**	**(Combined)**	22303719.464	6	3717286.577	2.983	.007
	Within Groups		1350834552.626	1084	1246157.336		
	Total		1373138272.090	1090			

Measures of Association

	Eta	Eta Squared
MWTP * INCOME	.127	.016

Regression Analysis

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	INCOME, EXPERIEN, DISTANCE(a)	.	Enter
a All requested variables entered.			
b Dependent Variable: MWTP			

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.153(a)	.023	.021	1110.73340
a Predictors: (Constant), INCOME, EXPERIEN, DISTANCE				

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32075180.437	3	10691726.812	8.666	.000(a)
	Residual	1341063091.652	1087	1233728.695		
	Total	1373138272.090	1090			
a Predictors: (Constant), INCOME, EXPERIEN, DISTANCE						
b Dependent Variable: MWTP						

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1244.093	106.482		11.684	.000
	EXPERIEN	73.844	71.296	.032	1.036	.301
	DISTANCE	210.325	68.295	.094	3.080	.002
	INCOME	115.508	29.372	.118	3.933	.000
a Dependent Variable: MWTP						

Appendix C

Statistical Analysis of Pneumonia Sample, with Households with Experience of Illness

Statistics

		DISTANCE	INCOME	PAYMENT	MWTP
N	Valid	388	388	388	388
	Missing	0	0	0	0
Mean		.3711	3.1649	.4691	1761.5722
Median		.0000	3.0000	.0000	1500.0000
Std. Deviation		.48373	1.15631	.49969	1115.80603
Minimum		.00	1.00	.00	170.00
Maximum		1.00	7.00	1.00	10000.00

Frequency Table

DISTANCE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	244	62.9	62.9	62.9
	1.00	144	37.1	37.1	100.0
	Total	388	100.0	100.0	

INCOME

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	8	2.1	2.1	2.1
	2.00	118	30.4	30.4	32.5
	3.00	131	33.8	33.8	66.2
	4.00	83	21.4	21.4	87.6
	5.00	33	8.5	8.5	96.1
	6.00	11	2.8	2.8	99.0
	7.00	4	1.0	1.0	100.0
	Total	388	100.0	100.0	

PAYMENT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	206	53.1	53.1	53.1
	1.00	182	46.9	46.9	100.0
	Total	388	100.0	100.0	

MWTP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	170.00	1	.3	.3	.3
	200.00	1	.3	.3	.5
	260.00	1	.3	.3	.8
	300.00	2	.5	.5	1.3
	375.00	1	.3	.3	1.5
	400.00	1	.3	.3	1.8
	420.00	1	.3	.3	2.1
	450.00	8	2.1	2.1	4.1
	475.00	1	.3	.3	4.4
	480.00	1	.3	.3	4.6
	500.00	17	4.4	4.4	9.0
	520.00	2	.5	.5	9.5
	550.00	3	.8	.8	10.3
	600.00	6	1.5	1.5	11.9
	660.00	1	.3	.3	12.1
	670.00	1	.3	.3	12.4
	700.00	17	4.4	4.4	16.8
	770.00	1	.3	.3	17.0
	800.00	4	1.0	1.0	18.0
	850.00	7	1.8	1.8	19.8
	900.00	8	2.1	2.1	21.9
	950.00	2	.5	.5	22.4
	1000.00	23	5.9	5.9	28.4
	1050.00	3	.8	.8	29.1
	1200.00	6	1.5	1.5	30.7
	1250.00	1	.3	.3	30.9
	1300.00	9	2.3	2.3	33.2
	1320.00	4	1.0	1.0	34.3
	1330.00	1	.3	.3	34.5
	1350.00	19	4.9	4.9	39.4
	1370.00	1	.3	.3	39.7
	1375.00	1	.3	.3	39.9
	1400.00	16	4.1	4.1	44.1
	1450.00	2	.5	.5	44.6
	1500.00	41	10.6	10.6	55.2
	1550.00	2	.5	.5	55.7
	1560.00	1	.3	.3	55.9
	1600.00	4	1.0	1.0	57.0
	1650.00	1	.3	.3	57.2
	1700.00	9	2.3	2.3	59.5
	1750.00	1	.3	.3	59.8
	1800.00	5	1.3	1.3	61.1
	1850.00	1	.3	.3	61.3

MWTP

		Frequency	Percent	Valid Percent	Cumulative Percent
	1900.00	1	.3	.3	61.6
	1980.00	1	.3	.3	61.9
	2000.00	37	9.5	9.5	71.4
	2100.00	3	.8	.8	72.2
	2150.00	1	.3	.3	72.4
	2200.00	4	1.0	1.0	73.5
	2250.00	1	.3	.3	73.7
	2300.00	12	3.1	3.1	76.8
	2350.00	1	.3	.3	77.1
	2400.00	1	.3	.3	77.3
	2500.00	23	5.9	5.9	83.2
	2550.00	3	.8	.8	84.0
	2600.00	5	1.3	1.3	85.3
	2625.00	1	.3	.3	85.6
	2700.00	1	.3	.3	85.8
	2750.00	2	.5	.5	86.3
	2800.00	7	1.8	1.8	88.1
	3000.00	15	3.9	3.9	92.0
	3250.00	1	.3	.3	92.3
	3450.00	1	.3	.3	92.5
	3500.00	8	2.1	2.1	94.6
	3750.00	1	.3	.3	94.8
	4000.00	9	2.3	2.3	97.2
	4500.00	2	.5	.5	97.7
	5000.00	5	1.3	1.3	99.0
	6000.00	2	.5	.5	99.5
	7000.00	1	.3	.3	99.7
	10000.00	1	.3	.3	100.0
	Total	388	100.0	100.0	

Mean Analysis

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
MWTP * DISTANCE	388	100.0%	0	.0%	388	100.0%
MWTP * INCOME	388	100.0%	0	.0%	388	100.0%
MWTP * PAYMENT	388	100.0%	0	.0%	388	100.0%

MWTP * DISTANCE

Report

MWTP

DISTANCE	Mean	N	Std. Deviation
.00	1614.0369	244	995.22791
1.00	2011.5625	144	1259.44619
Total	1761.5722	388	1115.80603

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
MWTP * DISTANCE	Between Groups	(Combined)	14310368.874	1	14310368.874	11.815	.001
	Within Groups		467513572.106	386	1211175.057		
	Total		481823940.979	387			

Measures of Association

	Eta	Eta Squared
MWTP * DISTANCE	.172	.030

MWTP * INCOME

Report

MWTP

INCOME	Mean	N	Std. Deviation
1.00	1392.5000	8	934.98281
2.00	1693.3475	118	1180.60358
3.00	1667.2519	131	1054.85894
4.00	1891.3253	83	1119.10000
5.00	1916.5152	33	1025.23662
6.00	2072.7273	11	1001.34001
7.00	2775.0000	4	1953.41581
Total	1761.5722	388	1115.80603

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
MWTP * INCOME	Between Groups	(Combined)	10167130.897	6	1694521.816	1.369	.226
	Within Groups		471656810.082	381	1237944.383		
	Total		481823940.979	387			

Measures of Association

	Eta	Eta Squared

MWTP * INCOME	.145	.021

MWTP * PAYMENT

Report

MWTP

PAYMENT	Mean	N	Std. Deviation
.00	1524.5388	206	944.86954
1.00	2029.8626	182	1230.66252
Total	1761.5722	388	1115.80603

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
MWTP * PAYMENT	**Between Groups**	**(Combined)**	24674388.224	1	24674388.224	20.834	.000
	Within Groups		457149552.755	386	1184325.266		
	Total		481823940.979	387			

Measures of Association

	Eta	Eta Squared
MWTP * PAYMENT	.226	.051

Regression Analysis

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	PAYMENT, INCOME, DISTANCE(a)	.	Enter
a All requested variables entered.			
b Dependent Variable: MWTP			

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.261(a)	.068	.061	1081.48042
a Predictors: (Constant), PAYMENT, INCOME, DISTANCE				

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	32697583.638	3	10899194.546	9.319	.000(a)
	Residual	449126357.341	384	1169599.889		
	Total	481823940.979	387			
a Predictors: (Constant), PAYMENT, INCOME, DISTANCE						
b Dependent Variable: MWTP						

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1127.144	169.617		6.645	.000
	DISTANCE	50.408	164.050	.022	.307	.759
	INCOME	123.911	47.560	.128	2.605	.010
	PAYMENT	476.573	158.796	.213	3.001	.003
a Dependent Variable: MWTP						

Appendix D

Statistical Analysis of Diarrhea Sample

Statistics

		EXPERIEN	DISTANCE	INCOME	MWTP
N	Valid	878	878	878	878
	Missing	0	0	0	0
Mean		.0672	.4818	3.1287	1632.0615
Median		.0000	.0000	3.0000	1500.0000
Std. Deviation		.25051	.49995	1.14733	1051.55983
Minimum		.00	.00	1.00	100.00
Maximum		1.00	1.00	7.00	10000.00

Frequency Table

EXPERIEN

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	819	93.3	93.3	93.3
	1.00	59	6.7	6.7	100.0
	Total	878	100.0	100.0	

DISTANCE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	455	51.8	51.8	51.8
	1.00	423	48.2	48.2	100.0
	Total	878	100.0	100.0	

INCOME

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	21	2.4	2.4	2.4
	2.00	271	30.9	30.9	33.3
	3.00	304	34.6	34.6	67.9
	4.00	180	20.5	20.5	88.4
	5.00	68	7.7	7.7	96.1
	6.00	26	3.0	3.0	99.1
	7.00	8	.9	.9	100.0
	Total	878	100.0	100.0	

MWTP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	100.00	2	.2	.2	.2
	200.00	3	.3	.3	.6
	250.00	5	.6	.6	1.1
	280.00	1	.1	.1	1.3
	300.00	8	.9	.9	2.2
	350.00	3	.3	.3	2.5
	400.00	9	1.0	1.0	3.5
	450.00	2	.2	.2	3.8
	500.00	40	4.6	4.6	8.3
	550.00	3	.3	.3	8.7
	600.00	6	.7	.7	9.3
	650.00	2	.2	.2	9.6
	660.00	3	.3	.3	9.9
	670.00	3	.3	.3	10.3
	680.00	2	.2	.2	10.5
	700.00	33	3.8	3.8	14.2
	750.00	1	.1	.1	14.4
	800.00	13	1.5	1.5	15.8
	900.00	4	.5	.5	16.3
	920.00	4	.5	.5	16.7
	950.00	10	1.1	1.1	17.9
	1000.00	47	5.4	5.4	23.2
	1200.00	17	1.9	1.9	25.2
	1320.00	15	1.7	1.7	26.9
	1330.00	4	.5	.5	27.3
	1350.00	92	10.5	10.5	37.8
	1360.00	1	.1	.1	37.9
	1370.00	2	.2	.2	38.2
	1380.00	1	.1	.1	38.3
	1400.00	24	2.7	2.7	41.0
	1450.00	5	.6	.6	41.6
	1460.00	1	.1	.1	41.7
	1500.00	192	21.9	21.9	63.6
	1600.00	9	1.0	1.0	64.6
	1700.00	3	.3	.3	64.9
	1710.00	7	.8	.8	65.7
	1720.00	2	.2	.2	65.9
	1750.00	17	1.9	1.9	67.9
	1800.00	13	1.5	1.5	69.4
	1900.00	2	.2	.2	69.6
	1980.00	9	1.0	1.0	70.6
	2000.00	156	17.8	17.8	88.4
	2100.00	1	.1	.1	88.5

MWTP

		Frequency	Percent	Valid Percent	Cumulative Percent
	2200.00	2	.2	.2	88.7
	2300.00	1	.1	.1	88.8
	2500.00	32	3.6	3.6	92.5
	2550.00	2	.2	.2	92.7
	2600.00	3	.3	.3	93.1
	2750.00	1	.1	.1	93.2
	2800.00	2	.2	.2	93.4
	3000.00	25	2.8	2.8	96.2
	3300.00	1	.1	.1	96.4
	3500.00	8	.9	.9	97.3
	4000.00	2	.2	.2	97.5
	4200.00	1	.1	.1	97.6
	5000.00	13	1.5	1.5	99.1
	6000.00	2	.2	.2	99.3
	10000.00	6	.7	.7	100.0
	Total	878	100.0	100.0	

Mean Analysis

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
MWTP * EXPERIEN	878	100.0%	0	.0%	878	100.0%
MWTP * DISTANCE	878	100.0%	0	.0%	878	100.0%
MWTP * INCOME	878	100.0%	0	.0%	878	100.0%

MWTP * EXPERIEN

Report
MWTP

EXPERIEN	Mean	N	Std. Deviation
.00	1625.4212	819	1048.85590
1.00	1724.2373	59	1093.46996
Total	1632.0615	878	1051.55983

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
MWTP * EXPERIEN	**Between Groups**	**(Combined)**	537398.331	1	537398.331	.486	.486

	Within Groups	969229970.348	876	1106426.907		
	Total	969767368.679	877			

Measures of Association

	Eta	**Eta Squared**
MWTP * EXPERIEN	.024	.001

MWTP * DISTANCE

Report
MWTP

DISTANCE	Mean	N	Std. Deviation
.00	1588.2198	455	1101.92668
1.00	1679.2199	423	993.68390
Total	1632.0615	878	1051.55983

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
MWTP * DISTANCE	Between Groups	(Combined)	1815268.104	1	1815268.104	1.643	.200
	Within Groups		967952100.575	876	1104968.151		
	Total		969767368.679	877			

Measures of Association

	Eta	Eta Squared
MWTP * DISTANCE	.043	.002

MWTP * INCOME

Report
MWTP

INCOME	Mean	N	Std. Deviation
1.00	1133.3333	21	525.19838
2.00	1549.4834	271	1052.83520
3.00	1608.1908	304	999.51425
4.00	1690.9444	180	1216.66579
5.00	1925.4412	68	996.37318
6.00	1853.8462	26	629.11415
7.00	2106.2500	8	763.65545
Total	1632.0615	878	1051.55983

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
MWTP * INCOME	Between Groups	(Combined)	16799240.309	6	2799873.385	2.559	.018
	Within Groups		952968128.370	871	1094108.069		
	Total		969767368.679	877			

Measures of Association

	Eta	Eta Squared

MWTP * INCOME	.132	.017

Regression Analysis

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	INCOME, EXPERIEN, DISTANCE(a)	.	Enter
a All requested variables entered.			
b Dependent Variable: MWTP			

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.128(a)	.016	.013	1044.71566
a Predictors: (Constant), INCOME, EXPERIEN, DISTANCE				

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	15856846.849	3	5285615.616	4.843	.002(a)
	Residual	953910521.829	874	1091430.803		
	Total	969767368.679	877			
a Predictors: (Constant), INCOME, EXPERIEN, DISTANCE						
b Dependent Variable: MWTP						

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	**(Constant)**	1246.521	107.527		11.593	.000
	EXPERIEN	91.984	140.893	.022	.653	.514
	DISTANCE	85.828	70.602	.041	1.216	.224
	INCOME	108.035	30.765	.118	3.512	.000
a Dependent Variable: MWTP						

Appendix E

Statistical Analysis of Pneumonia Sample, with Households with Experience of Illness

Statistics

		DISTANCE	INCOME	PAYMENT	MWTP
N	Valid	59	59	59	59
	Missing	0	0	0	0
Mean		.4407	3.2203	.7627	1724.2373
Median		.0000	3.0000	1.0000	1500.0000
Std. Deviation		.50073	1.23271	.42907	1093.46996
Minimum		.00	1.00	.00	200.00
Maximum		1.00	7.00	1.00	4200.00

Frequency Table

DISTANCE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	33	55.9	55.9	55.9
	1.00	26	44.1	44.1	100.0
	Total	59	100.0	100.0	

INCOME

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	1	1.7	1.7	1.7
	2.00	18	30.5	30.5	32.2
	3.00	21	35.6	35.6	67.8
	4.00	8	13.6	13.6	81.4
	5.00	9	15.3	15.3	96.6
	6.00	1	1.7	1.7	98.3
	7.00	1	1.7	1.7	100.0
	Total	59	100.0	100.0	

PAYMENT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	14	23.7	23.7	23.7
	1.00	45	76.3	76.3	100.0
	Total	59	100.0	100.0	

MWTP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	200.00	1	1.7	1.7	1.7
	250.00	2	3.4	3.4	5.1
	280.00	1	1.7	1.7	6.8
	300.00	1	1.7	1.7	8.5
	350.00	1	1.7	1.7	10.2
	500.00	4	6.8	6.8	16.9
	550.00	1	1.7	1.7	18.6
	600.00	1	1.7	1.7	20.3
	650.00	1	1.7	1.7	22.0
	700.00	2	3.4	3.4	25.4
	900.00	1	1.7	1.7	27.1
	1000.00	8	13.6	13.6	40.7
	1350.00	3	5.1	5.1	45.8
	1500.00	3	5.1	5.1	50.8
	1600.00	1	1.7	1.7	52.5
	1700.00	1	1.7	1.7	54.2
	1900.00	1	1.7	1.7	55.9
	2000.00	4	6.8	6.8	62.7
	2100.00	1	1.7	1.7	64.4
	2200.00	2	3.4	3.4	67.8
	2500.00	3	5.1	5.1	72.9
	2550.00	2	3.4	3.4	76.3
	2600.00	3	5.1	5.1	81.4
	2750.00	1	1.7	1.7	83.1
	2800.00	2	3.4	3.4	86.4
	3300.00	1	1.7	1.7	88.1
	3500.00	5	8.5	8.5	96.6
	4000.00	1	1.7	1.7	98.3
	4200.00	1	1.7	1.7	100.0
	Total	59	100.0	100.0	

Mean Analysis

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
MWTP * DISTANCE	59	100.0%	0	.0%	59	100.0%
MWTP * INCOME	59	100.0%	0	.0%	59	100.0%
MWTP * PAYMENT	59	100.0%	0	.0%	59	100.0%

MWTP * DISTANCE

Report
MWTP

DISTANCE	Mean	N	Std. Deviation
.00	1719.6970	33	1216.09900
1.00	1730.0000	26	938.57339
Total	1724.2373	59	1093.46996

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
MWTP * DISTANCE	Between Groups	(Combined)	1543.708	1	1543.708	.001	.972
	Within Groups		69347696.970	57	1216626.263		
	Total		69349240.678	58			

Measures of Association

	Eta	Eta Squared
MWTP * DISTANCE	.005	.000

MWTP * INCOME

Report
MWTP

INCOME	Mean	N	Std. Deviation
1.00	1500.0000	1	.
2.00	1488.8889	18	980.77934
3.00	1803.8095	21	1175.05522
4.00	1712.5000	8	1405.79159
5.00	1672.2222	9	766.93836
6.00	3300.0000	1	.
7.00	3500.0000	1	.
Total	1724.2373	59	1093.46996

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
MWTP * INCOME	Between Groups	(Combined)	6842062.107	6	1140343.684	.949	.469
	Within Groups		62507178.571	52	1202061.126		
	Total		69349240.678	58			

Measures of Association

	Eta	Eta Squared

MWTP * INCOME	.314	.099

MWTP * PAYMENT

Report
MWTP

PAYMENT	Mean	N	Std. Deviation
.00	1089.2857	14	595.23059
1.00	1921.7778	45	1141.60033
Total	1724.2373	59	1093.46996

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
MWTP * PAYMENT	**Between Groups**	**(Combined)**	7400290.043	1	7400290.043	6.809	.012
	Within Groups		61948950.635	57	1086823.695		
	Total		69349240.678	58			

Measures of Association

	Eta	Eta Squared
MWTP * PAYMENT	.327	.107

Regression Analysis

Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	PAYMENT, INCOME, DISTANCE(a)	.	Enter
a All requested variables entered.			
b Dependent Variable: MWTP			

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.362(a)	.131	.084	1046.72478
a Predictors: (Constant), PAYMENT, INCOME, DISTANCE				

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	**Regression**	9089438.847	3	3029812.949	2.765	.050(a)
	Residual	60259801.831	55	1095632.761		
	Total	69349240.678	58			
a Predictors: (Constant), PAYMENT, INCOME, DISTANCE						
b Dependent Variable: MWTP						

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	767.848	444.366		1.728	.090
	DISTANCE	-127.009	288.675	-.058	-.440	.662
	INCOME	122.029	114.995	.138	1.061	.293
	PAYMENT	812.082	338.618	.319	2.398	.020
a Dependent Variable: MWTP						