

التنبؤ بالأحتياجات من أدوية الأمراض المزمنة والمحافظة على المال العام*

المخلص

Abstract

The health section is considered to be one of the most important section in the field of service economical and social unit because of its concern in the life of human begin and society and the process of determining the need of drugs and estimating them correctly is one of the elements that would affect the quality of services presented to patient to and society in reducing the costs resulted from surplus inventory and the expiration date of drugs therefore it becomes necessarily looking for techniques or mechanisims in the process of estimating the needs for drugs for developing performances to attain the strategic goals in the health section and the problem of the research is contained in the difficulties that face the Ministry of Health in attuning the prewise fitness between the size of real demand and the size of expected the size demand that resulted from utilizing traditional or shallow and simple techniques which resulted in reducing the degree of confidence in the outcomes of those techniques in estimating the needs of drugs and then westing the public property the research aims to use relevant quantitative models to attain the precise fitness between the size of real demand and the size of anticipated demand for reducing the errors at the estimating process for the needs and then saving the public property and attaining the quality at health services the research contains five topics the first topic related to the methodology and the second one contains the theoretical frame the third one seeks in the reality of the estimation process for the needs of drugs for the health unit whereas the fourth one related to the usage of the scientific techniques used in the for casting of the needs and finally the fifth topic related to the conclusions and recommandations

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المبحث الأول / منهجية البحث

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-3 اختبار بعض الاساليب الاحصائية وانتقاء انسبها على وفق معيار MAPE لكل صنف من اصناف الادوية.

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2009-2007

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	MPAE		

linear TrendAnalysis	Exponential	Quadratic TrendAnalysis
الفردى	Moving Average	TrendAnalysis
Double Exponential	Single Exponential Smoothing	Smoothing
Time Series Decomposition	Winters`multiplicative	

المبحث الثاني / الأطار النظري

	- ()	:
	Estimation (Forecasting of Demand) – General Frame)	
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	(Concept of Forecasting)	-1
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(896:1972)	:
	(Predication)	(Forecast)
	(Guess)	
	(Intuition)	



- (Projection)
(Estimation)
(Extrapolation)
- (Oxford, 2000:590-256:)
(Dilworth)
(331:2003)
(Dilworth,1992:87)
(Heizer&Renden) (Martinich,1997:102)
- (Heizer&Renden,1999:142) .
Demand forecasting -2
(Heizer&Renden,1999:142)
(205:1997)
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(200-199:2006) .
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(Dilworth,1992:88)
(Schonberger&Knod,1994:152)
(91:1997)
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(306:2006) .
(Demand Estimates) (Gaither&Frazier)
(Sales Forecasts)
(Gaither&Frazier ,1999:59)



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- (200:2006) .
- (65:2000) .
- (Heizer&Renden,2001:80)
- (Russell&Taylor,2000:455)
- (Russell&Taylor,2000:455)



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Underlying Model:

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(72:2000) .

Time Horizon :

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(201:2006) :

the pattern of data:

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.(Krajewski&Ritzman,2005:537) ()

:costs

-

.(72:2000) .

understanding :

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(Forecasting Method of Demand) :

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: (81:2004)

: **Qualitative Method**

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: **Quantitative Method**

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Time Series Analysis

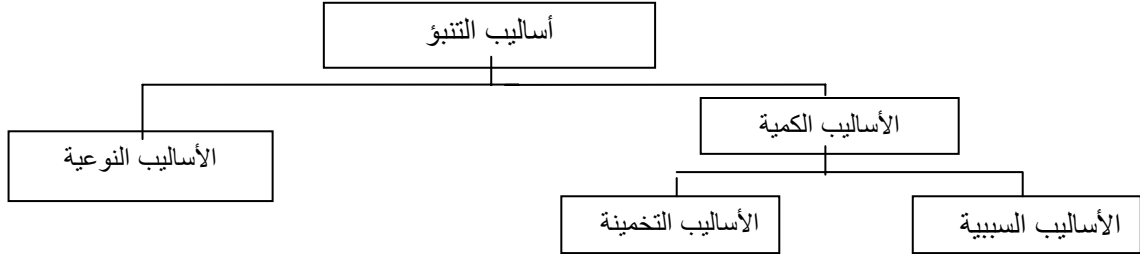
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Causal Methods

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(202:2006)

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	Public Funds :	-
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المبحث الرابع / الجانب العملي

(356 2003) .

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	(Fitting)	Mini tab	-
(((MPAE)	
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		:	(3)
	(Exponential Trend Analysis)	-
	(Depakin tab. Aldomet tab. Tenormin 100 mg tab. Lescol 20mg tab.)		
	(Time Series Decomposition)	-
		Insulin Tard	
	(Single Exponential Smoothing)	-
		(Sinemet tab)	
		(2009,2008,2007)	
		(2)	(4)
		للعوام (2009,2008,2007).	
(Sinemet tab)		(2007)	
		(2006)	
		(Aldomet tab)	
	(4)	2009 - 2007)	



$$(34079583276 = 7680940998 + 7461437198 + 18937205080) \quad (5)$$

$$(6) \quad (2009-2007) \\ (1815922568 = 684040976 + 584827578 + 547054014)$$

$$(2009-2007) \quad (1815922568)$$

$$(1815922568) \quad (34079583276) \\ (2009-2007) \\ (10754553569) \quad (32263660708)$$

$$(32263660708) = 1815922568 - 34079583276 \\ (10754553569) = 3 \div 32263660708$$



(2015-2011)

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(2015)	(7)	(2015 -2011)	
	(2274)	(Aldomet tab.)	
(1567269)	(Depakin tab.)		
	(1249476)	(2011)	(2015)
		(3) (2)	
		(Insulin tard)	
	(Lescol)		.2025
		(Tenormin tab)	
			(Sinemet tab)
			(Depakin tab)
		(Aldomet tab)	

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المبحث الخامس / الأستنتاجات والتوصيات

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(Depakin tab و Aldomet tab، Tenormin 100 mg tab، Lescol 20mg tab)	
(Insulin Tard) ()	
(Sinemet tab) ()	
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- 1- Dilworth, James B., Operations Management, design, planning, & control for manufacturing & services, McGraw-Hill, Inc., 1992.
- 2- Gaither, Norman & Frazier, Greg., Production & Operations Management, 8th ed., South-Western College Publishing, 1999.
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2007-2009

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		Lescol 20mg tab.	Tenormin 100 mg tab.	InsulinTard.vial	Aldomet tab.	Depakin 200 mg 40 tab	Sinemet tab.
2007	1	2500000	840000000	485000	45000000	22000000	7000000
2007	2	657300	107502080	47500	18529320	5133960	123880
	3	-1842700	-732497920	-437500	-26470680	-16866040	-6876120
	1-2=3						
	4	1842700	732497920	437500	26470680	16866040	6876120
	5	73%	87%	90%	58%	76%	98%
2007	100×1/4=5						
2008	1	1600000	84500000	564000	47602000	24120000	9500000
2008	2	913864	36849792	100210	16303980	12853800	3981060
	3	-686136	-47650208	-463790	-31298020	-11266200	-5518940
	1-2=3						
	4	686136	47650208	463790	31298020	11266200	5518940
	5	42%	56%	82%	65%	46%	58%
2008	100×1/4=5						
2009	1	2133650	71000000	722660	30000000	21400000	8500000
2009	2	1270332	28608300	195800	3165000	7438120	4325020
	3	-863318	-42391700	-526860	-26835000	-13961880	-4174980
	1-2=3						
	4	863318	34150208	526860	26835000	13961880	4174980
	5	40%	59%	72%	89%	65%	49%
2009	100×1/4=5						

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1	ExponentialTrendAnalysis	Lescol 20 mg tab
2	Exponentia TrendAnalysis	Tenormin 100 mg tab
3	ExponentialTrendAnalysis	Aldomet tab
4	ExponentialTrendAnalysis	Depakin tab
5	Single Exponential Smoothing	Sinemet tab
6	Time Series Decomposition	Insulin Tard



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	Lescol 20mg tab.	Tenormin 100 mg tab.	Insulin Tard.	Aldomet tab.	Depakin 200 mg 40 tab	Sinemet tab.
(2007)	73%	78%	90%	58%	76%	98%
(2007)	13%	33%	35%	4%	20%	47%
(2008)	42%	56%	82%	65%	46%	58%
(2008)	8%	15%	28%	9%	8%	6%
(2009)	40%	59%	72%	89%	65%	49%
(2009)	7%	12%	18%	20%	12%	21%

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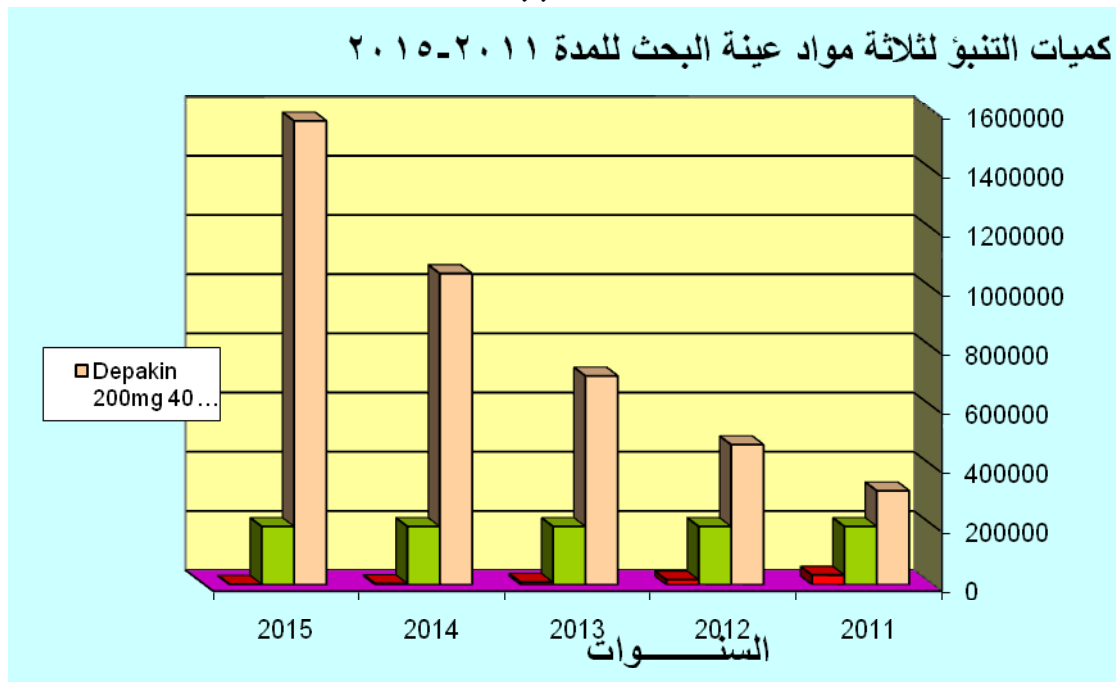
	Lescol 20mg cap.	Tenormin 100 mg.	Insulin Tard.	Aldomet tab.	Depakin 200 mg	Sinemet tab.
(2007) 1	1842700	732497920	437500	26470680	16866040	6876120
2	1065	13.5	4425	25	154	275
2×1= 3	1962475500	9888721920	1935937500	661767000	2597370160	1890933000
(2007)	18937205080					
(2008) 1	686136	47650208	463790	31298020	11266200	5518940
2	1065	13.5	4425	25	154	275
2×1= 3	730734840	643277808	2052270750	782450500	1734994800	1517708500
(2008)	7461437198					
(2009) 1	863318	34150208	526860	26835000	13961880	4174980
2	1065	13.5	4425	25	154	275
2×1= 3	919433670	461027808	2331355500	670875000	2150129520	1148119500
(2009)	7680940998					



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	Lescol 20mg tab.	Tenormin 100 mg tab.	Insulin Tard.	Aldomet tab.	Depakin 200 mg 40 tab	Sinemet tab.
2007	103124	15363746	26007	835530	1299280	111800
2	1065	13.5	4425	25	154	275
2×1= 3	109827060	207410571	115080975	20888250	200089120	30745000
2007				684040976		
2008	69692	5018611	39324	1475370	1051600	254600
2	1065	13.5	4425	25	154	275
2×1= 3	74221980	67751248	174008700	36884250	161946400	70015000
2008				584827578		
2009	88228	4052384	44374	822390	1098440	758780
2	1065	13.5	4425	25	154	275
2×1= 3	93962820	54707184	196354950	20559750	169159760	208664500
2009				547054014		

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