

# **UNIVERSITI PUTRA MALAYSIA**

ENHANCING MODERN CONTRACEPTIVE PRACTICES THROUGH WEB-DELIVERED AND PRINTED HEALTH EDUCATION MODULE AMONG MARRIED FEMALE STAFF IN UNIVERSITI PUTRA MALAYSIA

FATEMEH NAJAFI SHARJ ABAD

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By



Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirement for the Degree of Doctor of Philosophy

January 2014

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This thesis is especially dedicated to:

My loving parents, husband, children (Saba & Saleh), my sisters and brothers and all supportive family members for their understanding, encouragement and patience Abstract of thesis presented to the senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree Doctor of Philosophy

## ENHANCING MODERN CONTRACEPTIVE PRACTICES THROUGH WEB-DELIVERED AND PRINTED HEALTH EDUCATION MODULE AMONG MARRIED FEMALE STAFF IN UNIVERSITI PUTRA MALAYSIA

By

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January 2014

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In spite of the widely available family planning services in Malaysia during past three decades, the contraceptive prevalence rate (CPR) has a steady rate, only 34% of women use modern contraceptive methods. The aim of this cluster randomized controlled trial study was to evaluate the effect of web delivered and printed health educational module on improving reproductive health knowledge, beliefs, spousal communication, perceived social support and practices on modern contraceptive methods for preventing unintended pregnancy among married female staff in UPM.

Multistage random sampling was used for selection of faculties. The UPM area was divided to three zones and then randomly assigned to one of intervention or control zone. Then from each respective zone three faculties were selected. Baseline data collection on socio-demographic, marriage and reproductive health backgrounds, reproductive health knowledge, contraceptive beliefs, family planning spousal communication, perceived social support and practices on modern contraceptive methods were collected from the staff. A translated, reliable and valid tool based on Health Belief Model (HBM) was used to determine women's perception on using modern contraception for preventing pregnancy. Reproductive health education modules adapted based on World Health Organization Guideline for Family Planning and delivered through website and booklet to the respective intervention groups during one month. A Family Planning Expert was introduced to the website to answer questions about women's reproductive health. For the booklet group, question



and answer sessions were held by researcher at the work place. Both intervention groups received weekly reminder emails and tailored health messages for reading the module and motivation for contraceptive use during six months post intervention. The control group received the educational module only after the end of the study. Data were collected from control (n=127) and website (n=129) and booklet (n=130) at baseline, three and six months after end of intervention. Descriptive and multivariate statistics were used for analyzing the data using IBM, SPSS version 20. The mean age of respondents was 34.53 (SD=7.27) years and majority were Malay (96.1%) and Muslim (97.4%). Overall 36.8% used modern methods. Mistimed and unwanted pregnancies were reported by 22% and 11.4% of women respectively. One third of women experienced abortion.

Between group comparison at 3 months showed there were significant differences in the mean score of reproductive health knowledge (0.002), perceived susceptibility (p=0.001), benefits (p=0.004), and self-efficacy (<0.001) between control and intervention groups. Between groups comparison at 6 months showed the proportion of modern contraceptive use was significantly different between control and intervention groups. There were significant differences in the mean score of all HBM variables, perceived susceptibility (p<0.001), severity (p<0.001), benefits (p<0.001), barriers (p=0.001), cue to action (p=0.01), contraceptive self-efficacy (p<0.001) at 6 months post intervention. There were significant differences in the mean score of reproductive health knowledge (p<0.001), perceived social support (p<0.001), and spousal communication (p<0.001) between control and intervention groups.

Within group comparison showed among website the proportion of modern contraceptive use significantly increased over time (p=0.01). For website group from baseline to 6 months post intervention there were significant and consistent increase in the mean knowledge score (p<0.001), perceived susceptibility (p=0.002), severity (p=0.001), benefits (p=0.02), cue to action (p=0.008), contraceptive self-efficacy (p=0.001)0.003), perceived social support (p=0.01) and decreased barriers for using modern contraception (p=0.047). Within booklet from baseline to 6 months there were significant increase in the mean score of knowledge (p<0.001), perceived susceptibility (p=0.001), severity (p=0.005), benefits (p=0.015), self-efficacy (p=0.041) and social support (p=0.03). In the control group with the exception of reproductive health knowledge score which significantly changed from baseline to 6 months (p<0.001) no significant improvement was found in all other aspects. Webdelivered reproductive health education module which is accompanied by family planning counseling provide safe environment for discussing about sexual topics including contraceptive practices that is culturally sensitive among Malaysian educated women. At the end of study web-delivered health education intervention was more effective in decreasing barriers and improving modern contraceptives use, reproductive health knowledge, beliefs of educated married women in UPM as compared to printed reproductive health education module. Future family planning program need to be directed towards high risk cases, those with unmet needs for contraception and traditional contraceptive users to educate them regarding importance of family planning and choice of healthy timing and spacing of pregnancies.

Abstrak tesis yang dikemukakan kepada senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

# MENINGKATKAN AMALAN PERANCANGAN KEHAMILAN MODEN MELALUI PENYAMPAIAN WEB DAN MODUL PENDIDIKAN KESIHATAN BERCETAK DIKALANGAN KAKITANGAN WANITA YANG SUDAH BERKAHWIN DI UNIVERSITI PUTRA MALAYSIA

Oleh

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Walaupun perkhidmatan perancangan keluarga boleh didapati secara meluas di Malaysia sejak tiga dekad yang lalu, kadar prevalen pencegahan kehamilan adalah stabil, hanya 34 % menggunakan pencegahan kehamilan moden. Tujuan kajian percubaan terkawal rawak kluster ini ialah untuk menilai kesan penyampaian melalui web dan modul pendidikan kesihatan tercetak terhadap peningkatan pengetahuan kesihatan reproduktif, kepercayaan, komunikasi antara pasangan, anggapan sokongan sosial dan amalan kaedah pencegahan kehamilan moden untuk mengelakkan kehamilan yang tidak dirancang di kalangan wanita-wanita berkahwin di UPM. Pemilihan secara rawak berperingkat telah digunakan untuk memilih fakulti-fakulti di UPM.

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UPM telah dibahagikan kepada tiga zon dan seterusnya dipileh secara rawak kedalam zon intervensi atau kawalan. Kemudian, daripada setiap satu zon, tiga fakulti telah dipilih. Data permulaan telah dikumpul mengenai sosio-demografik, perkahwinan dan latar belakang kesihatan reproduktif, pengetahuan kesihatan reproduktif, kepercayaan pencegahan kehamilan, komunikasi pasangan mengenai perancangan keluarga, anggapan sokongan sosial dan amalan kaedah perancangan kehamilan moden. daripada kakitangan.Sebuah instrumen yang telah diterjemah, dipercayai dan disahkan berpandukan Model Kepercayaan Kesihatan (*Health Belief*)

*Model*, HBM) telah digunakan untuk menentukan persepsi wanita terhadap penggunaan kontraseptif

moden untuk mencegah kehamilan. Modul pendidikan kesihatan reproduktif telah diadaptsi daripada Garis panduan Pertubuhan Kesihatan Sedunia mengenai Perancangan Keluarga dan disampaikan melalui laman web dan buku kecil bagi setiap kumpulan intervensi selama sebulan. Seorang Pakar Perancang Keluarga telah diperkenalkan kepada kumpulan laman web untuk menjawab pertanyaan mengenai kesihatan reproduktif wanita. Bagi kumpulan buku kecil, sesi soal jawab telah diadakan di tempat kerja oleh Pakar Perancang Keluarga. Kedua-dua kumpulan intervensi telah menerima emel peringatan mingguan dan mesej kesihatan khusus supaya membaca modul dan sebagai motivasi untuk menggunakan kontraseptif semasa enam bulan selepas intervensi. Kumpulan kawalan telah menerima modul pendidikan hanya selepas tamat kajian tersebut.

Data telah dikumpul daripada kumpulan kawalan (n=127) dan kumpulan website (n=129) dan buku kecil (n=130), pada permulaan, intervensi dan tiga dan enam bulan selepas intervensi tamat. Statistik deskriptif dan multivatiat telah digunakan untuk menganalisis data dengan menggunakan IBM, SPSS versi 20. Min umur para responden adalah 34.53 (SD=7.27) tahun dan majority adalah berbangsa Melayu (96.1%) dan Muslim (97.4%) dengan pendidikan tahap ketiga (75.9%). Secara keseluruhan, seramai 51% wanita menggunakan kaedah pencegahan kehamilan, di mana 36.8% menggunakan kaedah-kaedah moden manakala 14.2% menggunakan kaedah tradisional. Tersilap waktu dan kehamilan yang tidak di ingini dilaporkan pada 22% dan 11.4%. Seramai 27.7% daripada wanita dilaporkan sejarah keguguran yang merangkumi 91.6% secara spontan dan 8.4% pengguguran induksi.

Perbandingan diantara kumpulan pada 3 bulan menunjukan perbezaan yang signifikan pada skor min pengetahuan reproduktif Selepas intervensi, terdapat peningkatan yang signifikan dalam skor min pengetahuan (p=0.002), anggapan kecenderungan (p=0.001), faedah (p=0.004), keberkesanan sendiri perancangan kehamilan (<0.001) diantara kumpulan kawalan dan intervensi Perbandingan diantara kumpulan pada 6 bulan menunjukan proporsi penggunaan perancangan kehamilan modern berbeza secara signifikan diantara kumpulan kawalan dan intervensi. Terdapat perbezaan signifikan dalam semua skor variable HBM, anggapan kecenderungan (p<0.001), keterukan (p<0.001), faedah (p<0.001), anggapan sokongan sosial ((p<0.001), dan komunikasi pasangan (p<0.001), diantara kumpulan kawalan dan intervensi

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Perbandingan didalam kumpulan laman web menunjukan proporsi pengunaan perancangan kehamilan modern meningkat secara signifikan dengan masa (p=0.01). Bagi kumpulan laman web dari permulaan hingga 6 bulan selepas intervensi terdapat peningkatan signifikan dan konsisten dalam skor min pengetahuan anggapan (p=<0.001), anggapan kecenderungan (p<0.002), keterukan (p=0.001), faedah (p=0.02), tanda untuk bertindak (p=0.008), keberkesanan sendiri perancangan kehamilan (p=0.003), anggapan sokongan sosial ((p=0.01), dan penurunan pada

halangan dalam menggunakan keberkesanan sendiri perancangan kehamilan (p<0.001).

Dalam kumpulan buku kecil, dari permulaan hingga 6 bulan terdapat peningkatan signifikan pada skor min pengetahuan anggapan (p=<0.001), anggapan kecenderungan (p<0.001), keterukan (p=0.005), faedah (p=0.015), keberkesanan sendiri (p=0.041) dan sokongan sosial ((p=0.03).

Dalam kumpulan kawalan pula, selain dari skor min pengetahuan reproduktif yang meningkat dari permulaan hingga 6 bulan (p<0.001), tiada peningkatan yang didapati dalam lain-lain aspek.

Modul pendidikan kesihatan disampaikan melalui web bersama dengan kauseling perancangan keluarga menyediakan persekitaran yang selamat untuk berbincang mengenai topic seksual termasuklah amalan perancangan keluarga yang sensitive dikalangan budaya wanita-wanita terpelajar Malaysian.

Diakhir penyelidikan, iintervensi yang disampaikan melalui web adalah lebih berkesan dalam mengurangkan halangan dan meningkatkan pengetahuan, kepercayaan dan amalan mengenai perancangan kehamilan moden. Pada masa akan datang, program perancangan keluarga perlu menjurus ke arah kes-kes berisiko tinggi, mereka yang mempunyai keperluan yang belum dipenuhi terhadap perancangan keluarga dan pengguna perancang keluarga tradisional untuk mendidik mereka mengenai kepentingan perancangan keluarga dan pemilehan masa yang sihat dan jarak penghamilan.

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Certify that a Thesis Examination Committee has met in 2013 to conduct the final examination of Fatemeh Najafi Sharj Abad on his thesis entitled "Enhancing Modern Contraceptive Practices Through Web-Delivered And Printed Health Education Module Among Married Female Staff In Universiti Putra Malaysia" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the students be awarded the degree of Doctor of Philosophy.

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